



Mr. James Saric  
Remedial Project Manager  
USEPA Region 5  
77 West Jackson Boulevard (SR-6J)  
Chicago, IL 60604-3507

ARCADIS  
10559 Citation Drive  
Suite 100  
Brighton  
Michigan 48116  
Tel 810.229.8594  
Fax 810.229.8837  
www.arcadis-us.com

Subject:

Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site  
Supplemental Remedial Investigations/Feasibility Studies Monthly Progress Report  
Area 1 – Morrow Dam to Plainwell Dam (January 2010)

SEDIMENTS

Dear Jim:

Attached is the 35<sup>th</sup> monthly progress report for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Supplemental Remedial Investigation/Feasibility Study (SRI/FS) – Area 1. This progress report is submitted as per Paragraph 37 of the February 2007 Administrative Settlement Agreement and Order on Consent (AOC) for Remedial Investigations/Feasibility Studies (Docket No. V-W-07-C-864), as well as Section 7.1 of the associated Statement of Work (SOW). If you have any questions, please do not hesitate to contact me.

Date:

February 15, 2010

Contact:

Michael J. Erickson, P.E.

Phone:

810.225.1924

Email:

michael.erickson@  
arcadis-us.com

Sincerely,

ARCADIS

Michael J. Erickson, P.E.  
Vice President

Our ref:

B0064539.0000.00014  
#2

MJE/plf  
Attachment

Copies:

Michael Berkoff, USEPA  
Sam Chummar, USEPA  
Sam Borries, USEPA  
Paul Bucholtz, MDNRE (with Attachment A)  
Jeff Keiser, CH2M HILL (with Attachment A)  
Todd Goeks, NOAA (with Attachment A)  
Richard Gay, Weyerhaeuser Company  
Martin Lebo, Weyerhaeuser Company  
Kathy Huibregtse, RMT Inc. (with Attachment A)  
J. Michael Davis, Esq., Georgia-Pacific LLC  
Garry Griffith, P.E., Georgia-Pacific LLC  
Paul Montney, P.E., Georgia-Pacific LLC

**MONTHLY PROGRESS REPORT FOR THE ALLIED PAPER, INC./PORTAGE CREEK/  
KALAMAZOO RIVER SUPERFUND SITE SRI/FS  
AREA 1 (MORROW DAM TO PLAINWELL DAM)**

**REPORT #35, JANUARY 2010**

**PREPARED BY ARCADIS U.S., INC.  
FEBRUARY 15, 2010**

**ON BEHALF OF GEORGIA-PACIFIC LLC**

**SUBMITTED TO**

**JAMES SARIC, REMEDIAL PROJECT MANAGER  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**Monthly Progress Report for the Allied Paper, Inc./Portage Creek/  
Kalamazoo River Superfund Site SRI/FS – Area 1**

**REPORT #35, JANUARY 2010**

**Significant Developments and Activities during the Period, Including Actions Undertaken Pursuant to the AOC and SOW**

- On January 4, ARCADIS U.S., Inc. (ARCADIS) submitted a revised *Multi-Area FS Technical Memorandum – Evaluation of Candidate Technologies and Testing Needs* (Section 4.1 of SOW) and a revised *Multi-Area FS Technical Memorandum - Preliminary Remedial Technology Screening* (Section 1.2.2.1 of SOW) to USEPA for review.
- On January 26, ARCADIS submitted to USEPA a draft letter (for discussion) requesting approval to discontinue groundwater sampling at the former Plainwell Impoundment.
- Georgia-Pacific LLC awaits USEPA's comments on the *Area 1 Work Plan Supplement: Baseline Ecological Risk Assessment Work Plan*.

**Data Collected and Field Activities Conducted during the Period**

- During the weeks of January 4, 11, and 18, ARCADIS continued the off-channel areas investigation (Table A). Sediment samples were submitted to TestAmerica Laboratories, Inc. (TestAmerica) for PCB analysis (Table B). ARCADIS discussed these sampling activities with Michigan Department of Natural Resources and Environment (MDNRE), in particular the "in between" transects, and forwarded interim probing data to the agencies for discussion.
- On January 6, ARCADIS forwarded to USEPA clarification regarding the approach for selection of cores for analysis for the off-channel areas sediment investigation.
- During the week of January 11, ARCADIS filleted the fish samples collected from locations throughout Areas 1 through 6 in October 2009 and forwarded the fillet samples to TestAmerica for PCB analysis (Table C). The fish samples had been held in frozen storage at the ARCADIS field office in Kalamazoo, Michigan.

**Laboratory Data Received during the Period**

- On January 4, 12, 15, 19, 20, 25, and 27, ARCADIS received from TestAmerica the remainder of the PCB analytical results for the hot spot assessment sediment samples that were collected in November 2009 (Sample Delivery Groups [SDGs] KAL489, KAL490, KAL491, KAL492, KAL494, KAL496, KAL 497, and KAL498) (Table D).
- On January 13, ARCADIS received from TestAmerica the PCB results from the 15 groundwater and two surface water samples collected in the former Plainwell Impoundment Time Critical Removal

**Monthly Progress Report for the Allied Paper, Inc./Portage Creek/  
Kalamazoo River Superfund Site SRI/FS – Area 1**

**REPORT #35, JANUARY 2010**

Action (TCRA) area in December (SDG KAL507) (Table E). This sampling is discussed in Section 3.4.6 of the Area 1 SRI/FS Work Plan.

- On January 19, on behalf of the MDNRE, CDM forwarded to ARCADIS the results of the split samples from the groundwater samples collected in the Plainwell TCRA area in December 2009.
- On January 27, 28, and 29, ARCADIS received from TestAmerica the PCB results from a portion of the Crown Vantage investigation sediment samples (SDGs KAL499, KAL500, and KAL501) (Table F).
- ARCADIS awaits the PCB analytical results for the off-channel areas investigation sediment samples (Table G) from TestAmerica.
- Validated data for the laboratory SDGs received in November 2009 are included in this monthly report. These data include the PCB results for the remainder of the focused step-out sediment cores from the FF-35 sampling area (SDG KAL479) (Table H); the radionuclide analytical results for selected sediment samples collected from Lake Allegan (SDGs Pb0188 and Pb0189) (Table I); and a portion of the PCB results for the surface sediment samples collected in Lake Allegan in October 2009 (SDG KAL483) (Table J). In accordance with Section 2.1 of the SOW, paper and electronic copies of these laboratory data are included as part of the monthly progress reports. Attachment A contains the validation reports for these data packages. The enclosed compact disk also contains the electronic data deliverable for these data.

**Problems**

- None.

**Actions Taken to Correct Problems**

- None.

**Developments Anticipated during the Next Two Reporting Periods**

- Validated data for the laboratory SDGs received in December will be included in the February monthly report. These data include the remainder of the PCB analytical results for the surface sediment samples collected in October 2009 from Lake Allegan (Area 6) (SDGs KAL484 and KAL485), the PCB analytical results for the Lake Allegan core sediment samples sent for PCB analysis on November 2, 2009 (SDGs KAL488 and KAL487), the PCB analytical results for the hot spot assessment sediment samples that were collected in October 2009 (SDGs KAL485 and KAL486), and a portion of the PCB analytical results for the hot spot assessment sediment samples that were collected in November 2009 (SDG KAL493).

**Monthly Progress Report for the Allied Paper, Inc./Portage Creek/  
Kalamazoo River Superfund Site SRI/FS – Area 1**

**REPORT #35, JANUARY 2010**

- By February 15, ARCADIS is scheduled to submit to USEPA the Semi-Annual Progress Report for the period from August 2009 through January 2010. This submittal is discussed in Section 7.2 of the SOW.
- By February 15, ARCADIS is scheduled to submit to USEPA the Annual Area Work Report for Areas 2 through 7, as discussed in Section 1.1.1 of the SOW.
- In February, ARCADIS expects to finalize the *Area 1 Work Plan Supplement: Baseline Ecological Risk Assessment Work Plan* and begin the work with the designated technical sub-group to develop toxicity reference values for the Area 1 Baseline Ecological Risk Assessment.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
<b>Area 1</b>							
1/5/2010	S-IS1-1	OCA1-1-1 (0+00)	1.6	0.4	For visual characterization only.	0 - 4	dark brown fine sand, trace fine gravel, trace organics (leaves, shells)
						4 - 6	light brown, fine to medium sand, some rounded fine to coarse gravel
1/5/2010	S-IS1-1	OCA1-1-2 (0+20)	2.6	1.1	For visual characterization only.	0 - 2	brown fine to medium sand, little fine gravel
						2 - 9	brown/black fine sand, trace fine gravel and medium to coarse sand, trace clay and silt, slight odor
1/5/2010	S-IS1-1	OCA1-1-3 (0+40)	1.3	1.7	For visual characterization only.	0 - 17	multi-colored fine rounded gravel, color grades to black at 17", trace fine sand, trace medium gravel, trace organics (shells), at 4" 1 cm thick seam of black silt, coarse core
1/5/2010	S-IS1-1	OCA1-1-4 (0+50)	0.1	3.3	For visual characterization only.	0 - 1	brown silty clay, multi-colored rounded fine gravel
						1 - 21	multi-colored rounded fine gravel, trace shells, trace medium rounded gravel, trace fine sand
						21 - 30	dark gray fine rounded gravel, little silt, trace organics (roots), trace fine sand, coarse core
1/6/2010	S-IS1-1	OCA1-1-5 (0+30) <sup>1</sup>	2.0	1.8	Collected 1 day after the rest of Transect 1 cores to obtain goal of 5 cores at Primary Transects. Selected for laboratory analysis.	0 - 4	brown fine rounded gravel and fine sand, trace shells
						4 - 11	dark brown fine sand, trace fine gravel, trace rootlets, trace clay
						11 - 12	brown fine rounded gravel and fine sand
						12 - 19	dark gray clayey silt, has odor
1/5/2010	S-IS1-1.5	OCA1-1.5-1 (0+00)	1.6	0.7	Could not penetrate actual probe depth	0 - 7	dark brown clayey silt, trace organics (rootlets), 0-4" organics (wood), soft, wet
						7 - 9	rounded coarse gravel and trace clayey silt, wet and trace fine gravel
1/5/2010	S-IS1-1.5	OCA1-1.5-2 (0+26)	2.5	1.9	For visual characterization only.	0 - 3	brown fine sand, trace organics (wood, roots)
						3 - 5	brown fine sand, trace organics (wood, roots), trace fine gravel and coarse sand, trace organics (roots and leaves) grading to dark brown
						5 - 9	brown fine to coarse sand, fine gravel, little organics (shells)
						9 - 13	dark brown, clayey silt, trace organics (roots and shells), soft
1/5/2010	S-IS1-1.5	OCA1-1.5-3 (0+50)	0.2	3.6	For visual characterization only.	0 - 23	multi-colored loose fine to medium rounded gravel, trace organics (shells), trace fine to coarse sand, @ 6-6 1/4" fine sand seam, graded to dark gray at 23"
						23 - 29	gray brown fine sand, trace silt
						29 - 36	gray brown fine sand, trace fine to medium rounded gravel, trace organics (shells), trace silt and clay, 29-31" - void air space
1/5/2010	S-IS1-2	OCA1-2-1 (0+00)	2.0	0.6	For visual characterization only.	0 - 3	black silt, high water content
						3 - 6	black silt, some fine to medium rounded gravel, trace organics (roots, leaves, twigs)
1/5/2010	S-IS1-2	OCA1-2-2 (0+25)	2.0	2.7	Gravel and Hard Bottom. For visual characterization only.	0 - 5	brown fine to medium sand and rounded fine gravel, trace shells
						5 - 14	dark gray fine to medium sand, trace fine gravel and coarse sand, trace twigs, trace shells

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/5/2010	S-IS1-2	OCA1-2-3 (0+44) <sup>1</sup>	2.2	1.0	Selected for laboratory analysis.	0 - 9	gray brown grading to dark gray, clayey silt, trace organics (roots hairs) at 0-3"
1/5/2010	S-IS1-2	OCA1-2-4 (0+56)	1.6	2.1	For visual characterization only.	0 - 12	dark brown silty clay, trace root hairs at top 3", trace fine sand
						12 - 19	brown to dark gray fine sand, little silty clay, wood chunk 3" min, trace broken shell fragment and/or foil/metal
						19 - 22	dark gray fine sand and clayey silt, trace wood and broken shell fragments
1/6/2010	S-IS1-2	OCA1-2-5 (0+15)	2.2	1.0	Collect 1 day after the rest of Transect 2 cores to meet goal of 5 cores at Primary Transects; Location chosen by CDM in the field. For visual characterization only.	0 - 2	brown fine sand and black fine gravel, trace silty clay, trace shells
						2 - 9	brown fine gravel, little fine sand, traces shells
						9 - 12	dark gray fine to coarse sand, trace fine gravel, trace coarse gravel, trace shells
1/5/2010	S-IS1-2.5	OCA1-2.5-1 (0+00)	2.7	1.4	EOW. For visual characterization only.	0 - 5	dark brown silty clay, organics (twigs, brick and leaves), little rounded medium gravel
						5 - 11	coarse rounded gravel, fine to medium sand, trace fine gravel
1/5/2010	S-IS1-2.5	OCA1-2.5-2 (0+30)	1.6	2.2	For visual characterization only.	0 - 16	multi-colored fine rounded gravel, trace fine sand and silt, trace organics (shells)
						16 - 19	dark gray, clayey silt, trace organics (bark, leaf, roots), trace fine gravel
						19 - 21	fine gravel lens, trace plastic
1/5/2010	S-IS1-2.5	OCA1-2.5-3 (0+62)	1.3	2.1	EOW. For visual characterization only.	0 - 3	dark brown fine sand/clayey silt, trace fine gravel, trace organics (leaf, roots, twigs)
						3 - 18	dark brown, clayey silt, trace organics (roots, shells)
1/5/2010	S-IS1-3	OCA1-3-1 (0+00)	1.5	1.3	EOW. For visual characterization only.	0 - 2	brown fine sand and trace fine gravel, trace organics (trees and root hair)
						2 - 10	dark brown grading to black clayey silt, trace organics (leaves, twigs, roots)
						10 - 13	dark brown grading to black clayey silt, trace organics (leaves, twigs, roots), little fine sand and trace fine gravel, color is black, has organic odor
1/5/2010	S-IS1-3	OCA1-3-2 (0+30)	1.0	2.3	For visual characterization only.	0 - 4	brown fine sand and leaves, trace shells
						4 - 9	brown fine sand, little fine gravel, trace organics (leaves)
						9 - 17	brown fine to coarse gravel, little fine sand, trace shells, trace silt
						17 - 24	black fine sand and coarse brown gravel, little fine gravel, little clayey silt, trace organics (shells)
1/5/2010	S-IS1-3	OCA1-3-3 (0+50)	2.5	1.7	For visual characterization only.	0 - 2	light brown fine to medium sand, trace twigs
						2 - 8	dark brown fine to medium sand and fine to medium rounded gravel, trace twigs
						8 - 16	brown/gray fine sand, some medium to coarse sand and fine gravel, black silt seam at 13" 1cm thick
						16 - 20	wood chunk

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/5/2010	S-IS1-3	OCA1-3-4 (0+62) <sup>1</sup>	0.8	2.2	EOW. Selected for laboratory analysis.	0 - 15	dark brown clayey silt, trace twigs, trace fine sand
						15 - 19	brown fine sand, trace shells and leaves, little clayey silt
1/6/2010	S-IS1-3	OCA1-3-5 (0+15)	1.4	2.3	Collected 1 day after the rest of Transect 3 cores to obtain goal of 5 cores at Primary Transects; Location chosen by CDM in the field	0 - 2	brown fine sand and leaves, little silt
						2 - 6	brown fine sand, coarse medium sand, trace fine gravel, trace twigs and shells
						6 - 14	dark brown, silty clay and fine sand, trace twigs
						14 - 19	dark gray fine to coarse sand, little silt, little fine to coarse gravel
1/5/2010	S-IS1-3.5	OCA1-3.5-1 (0+00)	0.2	2.4	EOW. For visual characterization only.	0 - 9	brown clayey silt, little fine sand, trace rounded fine gravel, trace organics (roots)
						9 - 13	black, rounded fine gravel, trace silt, (gravel seam)
						13 - 21	brown, clayey silt, trace (organics wood and roots)
1/5/2010	S-IS1-3.5	OCA1-3.5-2 (0+10)	2.0	2.3	For visual characterization only.	0 - 2	fine rounded gravel, coarse fine sand
						2 - 8	brown/dark brown, organic silt
						8 - 9	black fine gravel seam
						9 - 12	dark brown/brown organic silt
						12 - 20	brown fine sand, little silt, trace clay, trace organics (roots)
1/5/2010	S-IS1-3.5	OCA1-3.5-3 (0+20)	2.4	2.3	For visual characterization only.	0 - 3	brown fine coarse sand and fine rounded gravel, trace shells
						3 - 6	black fine sand, trace rounded gravel, trace shells
						6 - 9	brown fine rounded gravel, some fine sand
						9 - 20	brown fine sand, trace roots, trace silt and clay
1/5/2010	S-IS1-3.5	OCA1-3.5-4 (0+41)	2.5	2.1	EOW. For visual characterization only.	0 - 6	brown clayey silt, trace fine gravel, little organics (roots, twigs, leaves)
						6 - 24	dark brown clayey silt, some fine sand, trace organics (rootlets), bottom 1" is medium to coarse gravel
1/6/2010	S-IS1-4	OCA1-4-1 (0+00)	2.0	2.4	EOW. For visual characterization only.	0 - 22	dark brown clayey silt, wood fibers throughout, trace sticks and twigs, wood chunk 1" diameter at 16", top 4" very soft
1/6/2010	S-IS1-4	OCA1-4-2 (0+07)	2.6	3.0	Width of river (inlet) 25'. For visual characterization only.	0 - 27	dark brown clayey silt, little organic fiber throughout, trace shells at top 5", trace sticks/twigs, 22-23" gray coarse sand, fine to medium gravel (lens)
						27 - 34	gray fine to coarse sand, trace fine to coarse gravel, trace shells
1/6/2010	S-IS1-4	OCA1-4-3 (0+15)	2.6	3.1	For visual characterization only.	0 - 30	dark brown clayey silt, little fine sand, little wood fibers throughout, trace sticks and twigs, 24-30" grades to dark gray brown, top 9" - very soft, at 26" pocket of gray fine to medium sand 1/8"
1/6/2010	S-IS1-4	OCA1-4-4 (0+22) <sup>1</sup>	1.3	3.0	Chose to sample Core #4 based on 0-8" strata; Area of Interest for Agency. Selected for laboratory analysis.	0 - 8	dark gray silty clay, trace rootlets and twigs at 8", 1" wood chunk, has slight odor
						9 - 26	dark brown clayey silt, organic fibers throughout, trace twigs and sticks, has decayed organic odor, at 16.5" 1cm light brown silt lens
1/6/2010	S-IS1-4	OCA1-4-5 (0+25)	0.6	1.6	For visual characterization only.	0 - 5	gray brown clayey silt, trace root hairs
						5 - 16	dark brown clayey silt, trace sticks and twigs and root hair, at 16" 1" diameter wood chunk
1/6/2010	S-IS1-4.5	OCA1-4.5-1 (0+00)	0.5	1.0	Agency Area of Interest, however WP calls to sample from Primary Transects. For visual characterization only.	0 - 10	light gray grading to dark gray clayey silt, trace roots and leaves, slight odor at 5-10"

See Notes on Page 20.



**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/6/2010	S-IS1-4.5	OCA1-4.5-2 (0+15)	2.1	3.0	Additional core=4 total at transect 4.5; 0+15 location collected at request of J Bennet (CDM) in the field. For visual characterization only.	0 - 5	dark gray/black clayey silt, trace organics (leaves, roots, twigs), very soft
						5 - 22	dark brown clayey silt, little organic fiber throughout, trace fine to coarse sand, trace fine gravel, at 14-15" 1" thick medium to coarse sand gray/brown color, trace medium gravel
						22 - 26	dark brown fine to coarse sand, little clayey silt, trace fine gravel
1/6/2010	S-IS1-4.5	OCA1-4.5-3 (0+30)	1.4	3.2	For visual characterization only.	0 - 4	black/dark brown clayey silt, trace root hairs, very soft
						4 - 21	dark brown, clayey silt, trace twigs, rootlets, wood fibers throughout, wood chunk at 18-20"
						20 - 26	dark gray silty clay, little fine to coarse sand, trace fine to medium gravel, trace wood, trace shells
1/6/2010	S-IS1-4.5	OCA1-4.5-4 (0+57)	0.5	3.5	For visual characterization only.	0 - 5	dark brown silty clay, trace organics (rootlets and leaves)
						5 - 25	dark brown clayey silt, trace root hairs and wood
						25 - 27	dark gray, silty clay and fine sand, trace roots
1/6/2010	S-IS1-5	OCA1-5-1 (0+00)	0.6	2.8	EOW. For visual characterization only.	0 - 23	dark brown clayey silt, little wood fibers, trace sticks and root hairs, shells, trace fine sand, 0-8" saturated/high water content, very soft with leaves
1/6/2010	S-IS1-5	OCA1-5-2 (0+18)	1.2	1.8	For visual characterization only.	0 - 15	dark brown clayey silt, trace fine sand, trace sticks and root hairs, 0-5" saturated, high water content
						15 - 17	dark gray brown fine sand, some silt and clay, trace rootlets
1/6/2010	S-IS1-5	OCA1-5-3 (0+36) <sup>1</sup>	1.2	2.8	Chose to sample core #3 from Transect 5 based on strata within 9-15" interval. CDM requests 9-13" as opposed to 6-12" based on strata and area of interest at 0451 of all Transect 5 cores in name and station order from A to B side. Selected for laboratory analysis.	0 - 9	dark brown clayey silt, roots and wood fibers throughout, trace sticks, 1 mm gray fine to medium sand pocket at 7"
						9 - 13	dark brown grading to dark gray clayey silt, trace roots, little fine sand
						13 - 24	gray to brown, medium to coarse sand, some fine sand, trace shells and wood, 14-16" increase shell fragments, 20-20.5" dark brown seam of silt and fine to medium sand, trace clay, 24" fine gravel
1/6/2010	S-IS1-5	OCA1-5-4 (0+55)	0.7	2.5	For visual characterization only.	0 - 16	dark brown clayey silt, wood fibers throughout, trace fine sand, trace root hairs
						16 - 24	gray fine to medium sand and silt trace shells, trace fine to medium gravel, 20-21" lens of broken wood
1/6/2010	S-IS1-5	OCA1-5-5 (0+68)	0.2	1.8	Field measurements incorrect due to turbid water within lexan core, 12" recovery. For visual characterization only.	0 - 12	dark brown clayey silt, trace fine sand, root matter throughout, trace leaves in top 2"
1/6/2010	S-IS1-5.5	OCA1-5.5-1 (0+00)	0.6	3.5	EOW, water is down from pin. For visual characterization only.	0 - 13	dark brown clayey silt, little organics (roots, wood, leaves) soft, high water content
						13 - 20	dark brown clayey silt, trace fine to coarse sand, trace organics (roots and wood)
						20 - 23	brown fine to coarse sand, some silt, trace clay and shells
1/6/2010	S-IS1-5.5	OCA1-5.5-2 (0+30)	0.9	2.0	Center line. For visual characterization only.	0 - 24	dark brown clayey silt, trace fine sand grading to some fine sand at 23", trace wood, shells, root hairs, organics content higher within top 1 ft

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/6/2010	S-IS1-5.5	OCA1-5.5-3 (0+55)	0.6	3.0	EOW. For visual characterization only.	0 - 21	dark brown clayey silt, trace wood, top 6" soft, high organic content, trace root hairs throughout, grades to little to trace fine sand from 17-21'
						21 - 23	gray fine to medium sand, trace silt, trace shell fragments
1/6/2010	S-IS1-6	OCA1-6-1 (0+00)	0.2	3.0	For visual characterization only.	0 - 3	light brown fine to coarse sand, trace fine gravel, trace organics (leaves, twigs)
						3 - 21	dark brown, clayey silt, wood fibers throughout, trace wood and shells, 9-10" fine to coarse sand pocket, light brown to gray, 14-18" wood
						21 - 22	gray fine to coarse sand, trace fine gravel
1/6/2010	S-IS1-6	OCA1-6-2 (0+10)	1.2	2.0	For visual characterization only.	0 - 26	dark brown clayey silt, little to trace wood, trace root hairs, trace leaves, 18-26' trace fine to medium sand, trace fine gravel, 0-12" very soft, saturated - high water content
1/6/2010	S-IS1-6	OCA1-6-3 (0+18)	1.0	2.4	For visual characterization only.	0 - 15	dark brown clayey silt, trace root hairs, rootlets, twigs and leaves
						15 - 23	black clayey silt, trace shells/shell fragments/trace wood
1/6/2010	S-IS1-6	OCA1-6-4 (0+30)	1.1	2.7	For visual characterization only.	0 - 8	dark brown clayey silt and organics (wood fibers/roots/leaves)
						8 - 19	light brown grading to dark brown silt, some clay, little fine sand, trace shells, trace leaves
1/6/2010	S-IS1-6	OCA1-6-5 (0+44) <sup>1</sup>	0.3	3.0	Chose to sample core #5 from Transect 6 based on strata within 22-29" interval. CDM requests 22-29" interval as sample as opposed to 12-24 based on dark gray fine sand strata. Selected for laboratory analysis.	0 - 16	dark brown clayey silt, wood fibers throughout, sticks, trace leaves
						16 - 22	dark brown clay silt, little fine sand, trace shells, trace root hairs
						22 - 29	dark gray fine to medium sand, trace shells, trace wood, at 25-27" clay silt lens
						29 - 33	orange brown fine to medium sand, trace shell fragments
1/6/2010	S-IS1-6.5	OCA1-6.5-1 (0+00)	0.4	1.8	For visual characterization only.	0 - 5	dark brown to black fine to medium sand and clayey silt and roots, trace fine gravel
						5 - 16	fine to coarse gravel, little fine sand, trace shells, 13-16" some clayey silt
1/6/2010	S-IS1-6.5	OCA1-6.5-2 (0+15)	2.0	2.6	For visual characterization only.	0 - 17	dark brown to brown clayey silt, trace fine to medium sand, trace shells, rootlets at 16" 1 cm pocket of gray/brown fine to medium sand, soft at 0-9"
1/6/2010	S-IS1-6.5	OCA1-6.5-3 (0+35)	1.4	2.6	For visual characterization only.	0 - 16	black/dark brown clayey silt, little twigs, roots, trace leaves and shells, very soft
						16 - 31	brown to dark brown clayey silt, trace rootlets/hairs, trace sand
1/6/2010	S-IS1-6.5	OCA1-6.5-4 (0+51)	0.2	3.0	For visual characterization only.	0 - 16	dark brown clayey silt, wood fibers throughout, 12-16" trace fine to medium sand and shells
1/7/2010	S-IS1-7	OCA1-7-1 (0+00)	0.4	1.7	For visual characterization only.	0 - 8	black clayey silt, little organics (twigs, leaves, root hairs), soft
						8 - 15	light orange brown fine to coarse sand, some fine gravel, trace shells
						15 - 17	similar soils as 0-8", less soft
1/7/2010	S-IS1-7	OCA1-7-2 (0+10)	1.0	2.6	For visual characterization only.	17 - 22	wood chunk
						0 - 9	dark brown clayey silt, little organics (roots, twigs, leaves)
						9 - 18	light organic brown fine to coarse sand, some fine gravel, trace medium gravel and shells
						18 - 22	dark brown clayey silt, trace shells, trace wood

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/7/2010	S-IS1-7	OCA1-7-3 (0+20) <sup>1</sup>	1.1	1.9	Chose to sample core #3 from Transect 7 based on strata of interest 0-16". Selected for laboratory analysis.	0 - 16	dark brown clayey silt, trace organics (twigs and root hairs)
						16 - 18	coarse gravel at bottom
1/7/2010	S-IS1-7	OCA1-7-4 (0+30)	0.7	2.0	For visual characterization only.	0 - 15	dark brown clayey silt, little to some organics, roots, twigs, leaves, at 15" trace fine to coarse sand
1/7/2010	S-IS1-7	OCA1-7-5 (0+36)	0.4	1.8	For visual characterization only.	0 - 15	dark brown clayey silt, trace organics (roots and twigs)
<b>Area 5</b>							
1/13/2010	S-IL1-1	OCA5-1-1 (0+00)	0.2	1.0	For visual characterization only.	0 - 9	multi-colored fine to medium gravel, some shell concretions, little fine to coarser sand, trace organics (shells)
						9 - 11	dark gray clayey silt, trace fine to medium gravel, shell concretions 1" diameter
1/13/2010	S-IL1-1	OCA5-1-2 (0+20)	1.5	0.7	For visual characterization only.	0 - 6	brown to gray fine to coarse sand and shell concretions up to 2" in diameter, little shells and fine to medium gravel, trace silt and clay
1/13/2010	S-IL1-1	OCA5-1-3 (0+40)	1.6	0.8	For visual characterization only.	0 - 4	brown fine to coarse sand and fine gravel, little shells, little shell concretions 1" diameter
						4 - 8	gray to dark gray fine to medium sand, little fine gravel, trace medium gravel, trace shells
1/13/2010	S-IL1-1	OCA5-1-4 (0+60)	1.4	0.8	For visual characterization only.	0 - 2	brown fine to medium sand, trace fine gravel, wood, leaves
						2 - 7	dark gray fine sand, trace rootlets/root hairs, leaves, bottom 2" consists of 1" diameter shell concretions
1/13/2010	S-IL1-1	OCA5-1-5 (0+89) <sup>1</sup>	1.4	1.1	Chose to sample core location #5 from Transect 1 based on strata within 0-7". Selected for laboratory analysis.	0 - 7	dark gray fine to medium sand, little clayey silt, grading to clayey silt, has slight odor throughout, trace organics (roots, leaves, trace shells)
1/13/2010	S-IL1-1.5	OCA5-1.5-1 (0+00)	0.4	1.0	For visual characterization only.	0 - 11	dark gray brown silty clay, trace root hairs, trace fine sand, small pieces of tree bark at top of sediment surface
1/13/2010	S-IL1-1.5	OCA5-1.5-2 (0+35)	1.6	0.6	For visual characterization only.	0 - 2	brown fine to medium sand and organics (bark, roots, leaves), trace fine gravel, trace shells
						2 - 5	dark gray fine to medium sand and shell concretions, trace fine gravel, trace shells, trace roots
						5 - 7	brown fine to coarse sand, trace fine gravel, 1" shell concretions, trace shells
1/13/2010	S-IL1-1.5	OCA5-1.5-3 (0+73)	1.7	2.1	For visual characterization only.	0 - 5	dark brown/gray fine to medium sand, little clay and silt, trace roots, shells
						5 - 14	gray coarse sand, sized concretion grains, trace fine to medium sand, 2" diameter shell concretions at 5-7" and 12-14", at 5-7" trace wood, trace shells
1/13/2010	S-IL1-2	OCA5-2-1 (0+00) <sup>1</sup>	1.01	0.7	Chose to sample core location #1 from Transect 2 based on material within 0-7" interval. Selected for laboratory analysis.	0 - 7	dark brown silty clay, trace root hairs
						7 - 8	1" diameter shell concretions and dark gray clayey silt, trace fine to coarse sand, trace shell fragments

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/13/2010	S-IL1-2	OCA5-2-2 (0+20)	1.4	1.1	Three attempts to find previous probe depth. For visual characterization only.	0 - 1	shells/shell fragments
						1 - 3	brown shells and shell concretions, trace fine sand and silt
						3 - 7	1" diameter shell concretions, some gray fine to medium sand, trace coarse sand, trace shells
1/13/2010	S-IL1-2	OCA5-2-3 (0+40)	1.5	0.3	For visual characterization only.	0 - 4	1" diameter shell concretions and shells, trace fine gravel, trace fine to coarse sand
1/13/2010	S-IL1-2	OCA5-2-4 (0+60)	1.8	0.6	For visual characterization only.	0 - 2	shells and fine gravel, little brown fine to medium sand, 1" diameter shell concretions
						2 - 5	black fine to medium sand, some fine gravel, trace shells and shell concretions, trace roots
1/13/2010	S-IL1-2	OCA5-2-5 (0+85)	1.0	1.3	For visual characterization only.	0 - 1	dark gray fine to medium sand and clayey silt
						1 - 9	brown to dark gray fine to medium sand, little coarse sand, little clayey silt, 1/4" void at 6", 1/2" void at 9"
						9 - 10	dark gray fine to medium gravel, some fine to medium sand, some shell concretions
1/13/2010	S-IL1-2.5	OCA5-2.5-1 (0+00)	0.8	0.5	For visual characterization only.	0 - 5	brown to gray fine to medium sand and shell concretions, some coarse sand, trace shells, trace medium gravel
1/13/2010	S-IL1-2.5	OCA5-2.5-2 (0+60)	1.3	0.4	For visual characterization only.	0 - 4	shell concretions, some gray/brown fine to medium sand, little fine gravel
1/13/2010	S-IL1-2.5	OCA5-2.5-3 (0+80)	1.3	0.8	For visual characterization only.	0 - 5	brown fine to coarse sand, trace fine gravel, trace shells
						5 - 6	black fine to medium sand and shell concretions
1/13/2010	S-IL1-2.5	OCA5-2.5-4 (1+20)	0.4	1.0	For visual characterization only.	0 - 6	dark gray/brown clayey silt, some organics throughout, leaves, roots, trace shells, trace twigs
						6 - 13	black fine to medium sand, trace sticks, trace wood, trace shells
1/14/2010	S-IL1-3	OCA5-3-1 (0+00) <sup>1</sup>	0.7	1.9	Chose to sample core location #1 from Transect 3 based on material within 2-9" interval. Selected for laboratory analysis.	0 - 2	brown fine to medium sand and silt, some medium rounded gravel
						2 - 9	dark gray, silty clay, trace shell concretions, trace fine sand
						9 - 18	dark gray to light gray coarse sand sized concretions, some silt, trace medium gravel, 2" diameter shell concretions at bottom of core
1/14/2010	S-IL1-3	OCA5-3-2 (0+65)	0.7	0.6	For visual characterization only.	0 - 2	shells and dark brown fine to medium sand and organics (grass, leaves)
						2 - 5	black silt and fine to medium sand, some organics (grass and rootlets) some concretions
1/14/2010	S-IL1-3	OCA5-3-3 (1+00)	1.2	0.8	For visual characterization only.	0 - 1	brown fine gravel and shells and shell concretions, 1" diameter
						1 - 3	dark gray fine sand, some shells, little silt, trace wood, trace twigs
						3 - 6	dark gray/brown clayey silt, trace organics (root hairs, twigs) and trace shell concretions
1/14/2010	S-IL1-3	OCA5-3-4 (1+30)	0.9	0.9	For visual characterization only.	0 - 3	brown fine gravel and fine to coarse sand, little shells
						3 - 4	brown fine to medium sand, trace shells
						4 - 9	dark gray to black fine to medium sand and shell concretions, trace shells, trace twigs and leaves

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/14/2010	S-IL1-3	OCA5-3-5 (1+44)	0.9	1.5	For visual characterization only.	0 - 9	dark brown to dark gray fine to medium sand and clayey silt, trace shells, trace leaves
						9 - 18	gray brown fine to medium sand, well sorted, at 18" 1" diameter shell concretion (calcium carbonate) and shell fragments
1/14/2010	S-IL1-3.5	OCA5-3.5-1 (0+00)	0.9	1.2	For visual characterization only.	0 - 16	light brown/gray fine to coarse sand, trace shell concretions, trace shells, 0-4" some fine gravel, 4-16" trace fine gravel, 0-1" little silt
1/14/2010	S-IL1-3.5	OCA5-3.5-2 (0+30)	4.0	0.4	For visual characterization only.	0 - 2	brown fine gravel and shell concretions, trace medium gravel, little fine to medium sand and shells
						2 - 7	black fine to medium sand and shell concretions, trace shells
1/14/2010	S-IL1-3.5	OCA5-3.5-3 (0+50)	3.3	1.1	For visual characterization only.	0 - 8	light gray/brown fine to medium sand, trace fine gravel, 0-2" organics throughout leaves, shells, twigs, 2-4" 90% leaves
						8 - 11	black medium sand, trace fine sand and shell concretions
1/14/2010	S-IL1-3.5	OCA5-3.5-4 (0+66)	1.3	2.8	For visual characterization only.	0 - 2	black clayey silt, very soft, saturated, little leaves
						2 - 14	black to dark brown fine to medium sand, trace leaves and rootlets, has odor, 1" seam of black clay silt at 10" and 13"
						14 - 16	light brown, fine to medium sand, at 16" 1" diameter shell concretion
1/12/2010	S-IL1-4	OCA5-4-1 (0+00)	1.3	2.2	For visual characterization only.	0 - 12	dark gray, clayey silt, top 2" some organics roots, leaves, 1" thick wood chunks at 2-6", 1" pocket of fine to medium dark gray sand at 8", trace fine gravel at 8"pocket, from 5-8" has slight odor
1/12/2010	S-IL1-4	OCA5-4-2 (0+40)	2.8	1.2	For visual characterization only.	0 - 3	brown fine to medium sand, trace coarse sand, trace shells, trace fine gravel
						3 - 5	black clayey silt, trace organics (rootlets)
						5 - 10	dark gray to black fine to coarse sand, some fine to coarse gravel
						10 - 13	gray to dark gray fine to medium sand, trace fine to medium gravel
1/12/2010	S-IL1-4	OCA5-4-3 (1+00) <sup>1</sup>	1.8	1.0	Chose to sample location #3 from Transect 4 based on strata within 7-11". Selected for laboratory analysis.	0 - 1	brown fine to medium sand, trace coarse sand, trace rootlets and trace shells
						1 - 7	dark brown fine to coarse sand, some shells, trace fine gravel
						7 - 11	dark gray silty clay, strong odor, trace fine sand
						11 - 12	1/2" fine to coarse sand seam, dark gray, trace fine gravel, 1/2" dark gray clayey silt, little fine to medium sand, trace organics (roots), has strong odor
1/12/2010	S-IL1-4	OCA5-4-4 (1+30)	1.7	1.3	For visual characterization only.	0 - 2	brown fine to coarse sand, trace shells, 1 cm thick chunk of coal, trace fine gravel
						2 - 6	dark gray to dark brown fine to medium sand, trace shells, trace degraded wood chunks
						6 - 12	black fine to medium sand and shells, some medium to coarse gravel, trace fine gravel
1/12/2010	S-IL1-4	OCA5-4-5 (1+69)	1.4	1.5	For visual characterization only.	0 - 16	fine to coarse sand, trace fine gravel, 0-4" at 2" - 1/2" pocket of dark gray silty clay, trace organics (roots), fine to medium sand, some coarse sand, 4-6" fine to medium sand, trace coarse sand, 6-11" medium to coarse sand, trace fine sand, decreasing clay from here down, 11-16" fine to medium dark gray sand and coarse sand

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/12/2010	S-IL1-4.5	OCA5-4.5-1 (0+00)	1.5	1.2	For visual characterization only.	0 - 2	dark brown very soft/very saturated, clayey silt, trace organics (twigs, roots, leaves)
						2 - 7	dark brown clayey silt, grading to dark gray clayey silt 8-12", trace twigs, trace organics (root hairs)
1/12/2010	S-IL1-4.5	OCA5-4.5-2 (0+20)	2.8	1.2	For visual characterization only.	0 - 6	dark brown clayey silt, slight odor, trace root wood hairs, trace fine sand
						6 - 9	dark brown fine to medium sand, trace clayey silt, trace shells, trace wood, trace fine gravel, has slight odor
						9 - 13	dark brown coarse gravel, trace fine to medium gravel, trace clayey silt, trace fine to coarse sand, trace shells
1/12/2010	S-IL1-4.5	OCA5-4.5-3 (0+53)	1.6	2.0	For visual characterization only.	0 - 3	dark brown, clayey silt, little to trace organics twigs, leaves, roots
						3 - 17	dark brown fine sand and silt, little clay and medium sand, trace shells, trace coarse sand, trace roots
						17 - 19	dark brown clayey silt, trace fine gravel, trace fine to medium sand at 17" - 1/2" thick seam of fine to medium black sand, has slight odor
						19 - 21	dark gray fine to medium sand and medium to coarse gravel, little fine gravel, trace shells, trace clay and silt
1/12/2010	S-IL1-5	OCA5-5-1 (0+00)	1.2	1.4	Offset 1-2' from EOW due to roots. For visual	0 - 4	dark brown silty clay, trace root hairs, leaves and twigs, slight odor
						4 - 7	brown fine to medium sand, little silt and clay, trace coarse sand
						7 - 9	dark gray fine to medium sand, little silt and clay, trace coarse sand
						9 - 12	dark gray/brown clayey silt, some fine sand, trace fine gravel, trace root hairs
1/12/2010	S-IL1-5	OCA5-5-2 (0+15)	2.0	1.4	For visual characterization only.	0 - 10	dark brown clayey silt, trace root hair, 6-7" 1" fine to coarse sand seam, little shells, slight odor throughout
						10 - 12	gray saturated wood, some clayey silt and fine gravel, trace shells, trace medium gravel, little fine to medium sand, slight odor throughout
1/12/2010	S-IL1-5	OCA5-5-3 (0+26) <sup>1</sup>	3.0	1.3	Chose to sample location #3 from Transect 5 based on strata within 0-12" (color, material and odor). 2nd transect core = #4 3rd = #1 of interest. Selected for laboratory analysis.	0 - 9	dark brown/gray clayey silt, trace roots, shells, 1" thick seam at 6", dark brown/clayey silt and fine to medium sand
						9 - 12	brown fine to coarse sand and fine to coarse gravel, trace shells, trace silt and clay, has slight odor
1/12/2010	S-IL1-5	OCA5-5-4 (0+40)	2.0	1.8	For visual characterization only.	0 - 6	dark brown, clayey silt, some organics, twigs, wood, leaves, trace shells, very soft/saturated
						6 - 17	black clayey silt, trace leaves, twigs, trace shells, trace fine gravel, has slight odor
1/12/2010	S-IL1-5	OCA5-5-5 (0+58)	1.9	1.7	For visual characterization only.	0 - 4	brown clayey silt, trace shells, twigs and leaves
						4 - 7	black fine sand, trace clayey silt, trace medium sand
						7 - 8	brown, clay, some silt, trace fine sand and shells
						8 - 13	laminated brown clayey silt and black fine sand, trace shells and roots and twigs
						13 - 19	black fine sand and clayey silt, trace medium to coarse sand, trace shells

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/12/2010	S-IL1-5.5	OCA5-5.5-1 (0+00)	1.0	0.6	For visual characterization only.	0 - 6	dark gray clayey silt, little fine gravel, trace wood, leaves, shells, trace fine to coarse sand at 6", rounded coarse gravel
1/12/2010	S-IL1-5.5	OCA5-5.5-2	2.4	0.9	For visual characterization only.	0 - 6	dark brown very soft/saturated clayey silt, trace rootlets
						6 - 7	shell with concretion, originally coarse gravel before broken
						7 - 10	black fine to medium sand, trace coarse sand and fine gravel, trace twigs and shells, has slight odor
1/12/2010	S-IL1-5.5	OCA5-5.5-3	1.1	NR	For visual characterization only.	0 - 3	gray brown clayey silt, some organics (twigs, leaves, rootlets)
						3 - 5	dark gray clayey silt, trace rootlets
						5 - 7	black fine sand, little to trace clayey silt, trace shells
						7 - 11	black clayey silt, trace shells, trace rootlets
1/12/2010	S-IL1-6	OCA5-6-1 (0+00)	0.2	0.9	For visual characterization only.	0 - 5	dark gray brown silty clay, organics throughout (rootlets)
						5 - 8	dark gray brown silty clay, trace organics (rootlets)
						8 - 9	dark gray brown fine to medium sand, little coarse sand, trace fine gravel, trace wood, trace clay and silt, trace shells
1/12/2010	S-IL1-6	OCA5-6-2 (0+15)	1.9	2.1	For visual characterization only.	0 - 4	dark gray brown clayey silt, some organics (twigs, leaves, rootlets)
						4 - 9	dark gray brown fine to medium sand and clayey silt, 4-7" little shells and wood, 7-9" little wood chunks
						9 - 15	dark gray brown to black clayey silt, trace shells, trace fine to coarse sand, trace rootlets
						15 - 23	black to dark gray, fine to coarse sand, trace silty clay, trace fine gravel, trace shells, medium rounded gravel at bottom
1/12/2010	S-IL1-6	OCA5-6-3 (0+25)	1.6	2.3	For visual characterization only.	0 - 3	black clayey silt, trace wood sticks and leaves, trace shells, trace fine gravel
						3 - 6	black silty clay, trace fine gravel, trace fine to coarse sand, trace shells
						6 - 9	dark gray fine to medium sand, little silt, trace clay, trace shells
						9 - 17	black clayey silt, 13-14" lens of fine to medium sand, trace fine gravel, 14-15" seam of organic rich clayey silt
						17 - 19	fine to medium sand (black) and clayey silt, trace shells and rootlets
						19 - 21	medium gravel sized concretion, medium to coarse gravel, strong reaction with HCL present (calcium carbonate)
						21 - 26	dark gray brown clayey silt, trace fine to medium sand, trace shells
1/12/2010	S-IL1-6	OCA5-6-4 (0+35) <sup>1</sup>	1.5	2.2	Chose to sample location 4 of Transect 6 based on strata within 6-12" interval (odor and color), compared to core 5 and core 3 of transect. Selected for laboratory analysis.	0 - 6	dark brown/gray clayey silt, trace rootlets
						6 - 12	dark gray/black silty clay, trace shells, roots and has slight odor
						12 - 14	black fine sand, trace clay and silt
						14 - 22	black clayey silt, trace fine to medium sand and root hairs
1/12/2010	S-IL1-6	OCA5-6-5 (0+44)	0.3	2.5	For visual characterization only.	0 - 9	brown silty clay, trace rootlets, shells, 6-9" trace fine to medium sand
						9 - 12	black fine to medium sand, trace roots
						12 - 26	laminated brown fine to medium sand and dark gray/black clayey silt, trace rootlets

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/13/2010	S-IL1-6.5	OCA5-6.5-1 (0+00)	0.5	3.1	For visual characterization only.	0 - 7	brown silty clay, trace rootlets, shells
						7 - 14	dark gray brown clayey silt, trace twigs and shells, trace fine to medium sand
						14 - 19	black very soft, clayey silt
						19 - 22	brown fine to coarse sand, some fine to medium gravel, at 22" 1" thick shell concretion
						22 - 25	dark gray to black clayey silt
						25 - 33	light brown medium to coarse sand, some fine sand, little fine to medium gravel, little shells
1/13/2010	S-IL1-6.5	OCA5-6.5-2 (0+15)	1.2	3.5	For visual characterization only.	0 - 15	dark gray/black clayey silt, trace rootlets, trace leaves, has slight odor
						15 - 21	dark brown, fine to medium sand, little coarse sand, trace shells and fine gravel 20-21" at 20" 1" shell concretion
						21 - 23	black clayey silt, trace fine to coarse sand
						23 - 39	dark gray/brown fine sand and silt, little medium sand, trace wood, shells, trace clay
1/13/2010	S-IL1-6.5	OCA5-6.5-3 (0+30)	1.8	1.3	For visual characterization only.	0 - 7	dark gray/brown clayey silt, very soft/saturated, trace rootlets and shells
						7 - 9	black clayey silt, very soft/saturated, trace rootlets, slight odor
						9 - 13	rounded medium gravel, shell concretions, trace coarse sand, trace clay and silt
1/13/2010	S-IL1-6.5	OCA5-6.5-4 (0+53)	0.2	1.9	For visual characterization only.	0 - 6	brown clayey silt, trace root hairs
						6 - 10	dark brown silty clay, trace shells and root hairs
						10 - 21	dark gray/black, silty clay, trace rootlets/stems
						21 - 23	dark gray brown fine to medium sand, trace shells and coarse sand, 1" diameter shell concretions
1/13/2010	S-IL1-7	OCA5-7-1 (0+00)	1.6	1.8	For visual characterization only.	0 - 12	dark brown fine to medium sand, lenses: 0-1" trace organics, bags, stems, shells, 3-4" black silty clay, little organics twigs, rootlets, 6-8" black silty clay, little organics twigs, rootlets, shells, 8-11" black silty clay, little organics twigs, rootlets, shells
						12 - 15	dark gray clayey silt, little fine to medium sand
						15 - 18	dark gray fine to medium gravel, little clayey silt, trace fine to medium silt, several 1" diameter shell concretions
1/13/2010	S-IL1-7	OCA5-7-2 (0+05)	1.8	1.9	For visual characterization only.	0 - 1	brown fine sand, some silt, trace shells, rootlets and leaves
						1 - 11	dark gray to black clayey silt, very soft, trace shells, trace fine to medium sand, 3-6" seam of black fine to medium sand, some silt and shells, 6-10" organic rich seam black, 10-11" 1" diameter shell concretions
						11 - 17	brown fine to medium sand, fine to medium gravel, trace coarse sand, trace shells

See Notes on Page 20.



**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/13/2010	S-IL1-7	OCA5-7-3 (0+10)	2.0	1.8	For visual characterization only.	0 - 7	dark gray clayey silt, trace shells and rootlets, very soft, has slight odor
						7 - 10	dark gray, shell concretions and fine to medium gravel, some coarse sand, trace silt and clay
						10 - 11	dark gray clayey silt and shells, trace coarse sand
						11 - 16	dark brown grading to brown fine to medium sand, trace shells, trace coarse sand, trace fine gravel
1/13/2010	S-IL1-7	OCA5-7-4 (0+15) <sup>1</sup>	0.8	2.2	Chose to sample based on strata within 0-14" based on (color material and size). Selected for laboratory analysis.	0 - 14	dark brown clayey silt, trace organics (twigs, roots, shells), has odor
						14 - 15	dark brown to dark gray color change
						15 - 20	dark gray/brown fine to medium sand, trace fine gravel and coarse sand, trace shells, several shell concretions
1/13/2010	S-IL1-7	OCA5-7-5 (0+23)	0.2	2.7	For visual characterization only.	0 - 17	dark brown grading to dark gray clayey silt, trace shells, top 5" organic rich, roots, twigs, wood, slight odor
						17 - 18	1" shell concretion, trace black clayey silt
						18 - 28	dark brown grading to brown fine to medium sand, trace coarse sand, trace shell, 1" diameter stick
1/13/2010	S-IL1-7.5	OCA5-7.5-1 (0+00)	0.2	1.6	For visual characterization only.	0 - 12	dark brown clayey silt, little organics throughout (roots), trace shells, shell concretions, medium sized at bottom, slight odor
1/13/2010	S-IL1-7.5	OCA5-7.5-2 (0+10)	1.0	1.1	For visual characterization only.	0 - 7	black clayey silt, very soft, some organics (bark, roots, leaves)
						7 - 10	dark gray fine to medium sand and shell concretions, trace silt, trace shells
1/13/2010	S-IL1-7.5	OCA5-7.5-3 (0+19)	0.4	1.6	For visual characterization only.	0 - 5	dark brown clayey silt, trace root hairs
						5 - 12	black silty clay, trace root hairs, trace shells, very soft, slight odor
						12 - 18	dark brown fine to medium sand and clayey silt, grades to little clayey silt at 18", trace shells, trace rootlets
Area 10							
1/14/2010	S-PC1A-1	OCA10-1-1 (0+00)	1.1	1.5	For visual characterization only.	0 - 10	brown clayey silt, some black organics (wood, roots, shells), trace fine to coarse sand
						10 - 12	light brown/tan, fine sand, little organics (wood-highly degraded)
						12 - 15	orange brown fine to coarse sand, little fine to medium gravel with shell concretions intermixed
1/14/2010	S-PC1A-1	OCA10-1-2 (0+60)	1.2	1.0	For visual characterization only.	0 - 3	dark brown grading to dark gray, clayey silt, some organics (roots, shells, wood, little fine sand)
						3 - 12	dark gray grading to orange brown, fine to coarse sand, little fine to medium gravel (shells and shell concretions)
1/14/2010	S-PC1A-1	OCA10-1-3 (1+00)	0.0	2.0	For visual characterization only.	0 - 3	dark brown clayey silt, little organics (roots), trace fine sand
						3 - 5	shell concretions, little fine to medium sand, trace clayey silt
						5 - 7	dark gray, clayey silt, little fine sand, trace organics (roots and shells)
						7 - 10	white/dark gray organics (shells, roots) shell concretions, little fine sand

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/14/2010 (Cont.)	S-PC1A-1	OCA10-1-3 (1+00)	0.0	2.0	For visual characterization only.	10 - 12	dark gray brown fine sand, little silt, little organics (wood and shells)
						12 - 21	orange brown fine to medium sand, some organics (shells), trace coarse sand, trace shell concretions
1/14/2010	S-PC1A-1	OCA10-1-4 (1+05) <sup>1</sup>	0.3	1.6	Area of interest is 0-8" fine clay material. Selected for laboratory analysis.	0 - 8	dark gray brown clayey silt, little organics (roots, shells and wood), trace fine sand
						8 - 16	gray brown to light gray brown primary concretions, some fine to coarse and, trace fine to medium gravel
1/14/2010	S-PC1A-1	OCA10-1-5 (1+13)	0.1	1.7	For visual characterization only.	0 - 15	dark gray brown clayey silt, little organics (roots, wood, shells), trace fine sand
						15 - 16	multi-colored fine to medium sand, some shell concretions, trace coarse sand
1/14/2010	S-PC1A-1.5	OCA10-1.5-1 (0+00)	0.2	1.3	For visual characterization only.	0 - 7	brown fine to coarse sand, trace organics (leaves, roots) trace very fine sand, some fine to coarse gravel
						7 - 14	light brown fine to coarse sand (well sorted) trace fine to medium gravel, trace broken shell fragments
1/14/2010	S-PC1A-1.5	OCA10-1.5-2 (0+69)	0.4	1.3	For visual characterization only.	0 - 2	dark brown silty fine sand, with organics (roots, twigs)
						2 - 6	dark gray brown clayey silt, trace broken shell fragment, trace root hairs
						6 - 11	multi-colored fine to coarse sand, fine to medium shell concretions, trace organics (wood), trace shell fragments
1/14/2010	S-PC1A-1.5	OCA10-1.5-3 (1+10)	0.1	2.3	For visual characterization only.	0 - 4	dark gray brown clayey silt, some organics (wood, roots), trace leaves
						4 - 12	gray brown silt grading to fine sand
						12 - 21	brown/tan fine to sand, little organics (shells, shell fragments)
1/14/2010	S-PC1A-1.5	OCA10-1.5-4 (1+26)	0.2	1.6	For visual characterization only.	0 - 8	dark gray brown clayey silt, some fine sand, light organics (root, shells, leaf litter)
						8 - 13	dark gray brown clayey silt, some fine sand, some concretions, trace organics (shell)
						13 - 17	light orange brown concretions, some fine to coarse sand, trace fine to medium gravel, trace shell
1/14/2010	S-PC1A-2	OCA10-2-1 (0+00) <sup>1</sup>	0.7	0.8	Selected for laboratory analysis.	0 - 5	dark brown fine sand, little silt, trace medium coarse sand, trace fine to medium gravel, trace organics (roots)
						5 - 9	brown fine to coarse gravel, little fine to medium sand, trace coarse sand, trace silt
1/14/2010	S-PC1A-2	OCA10-2-2 (0+10)	1.3	0.5	For visual characterization only.	0 - 0.5	dark brown organics (leaf litter/wood)
						0.5 - 4	brown fine sand, trace medium to coarse sand, trace fine to medium gravel, trace shells
1/14/2010	S-PC1A-2	OCA10-2-3 (0+30)	1.2	0.4	For visual characterization only.	0 - 2	brown shells, little fine sand, trace medium to coarse sand, trace fine gravel
						2 - 4	2-3" concretions

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/14/2010	S-PC1A-2	OCA10-2-4 (0+40)	0.8	0.8	For visual characterization only.	0 - 1	brown shells, trace fine sand
						1 - 5	brown fine sand, little to some shells, trace medium to coarse sand, trace fine gravel
						5 - 6	medium gravel sized concretions, little fine sand
1/14/2010	S-PC1A-2	OCA10-2-5 (0+51)	0.5	0.5	For visual characterization only.	0 - 1	coarse gravel sized concretion
						1 - 6	dark brown fine sand, little fine to coarse gravel, trace medium to coarse sand, trace organics (shells), trace fine gravel sized concretions
1/19/2010	S-PC1A-2.5	OCA10-2.5-1 (0+00)	0.9	2.0	For visual characterization only.	0 - 4	dark brown silt, little fine sand, trace fine to coarse gravel, trace medium to coarse sand
						4 - 5	orange/brown conglomerate concretions (gravel/shells)
						5 - 15	orange/brown fine sand, trace medium to coarse sand, trace fine to coarse gravel, trace silt
1/19/2010	S-PC1A-2.5	OCA10-2.5-2 (0+10)	2.1	0.9	For visual characterization only.	0 - 3	dark brown fine sand, little medium to coarse sand, trace fine gravel, trace shells
						3 - 9	dark brown fine sand, trace medium to coarse sand, trace fine to medium gravel, trace silt, trace shells
1/19/2010	S-PC1A-2.5	OCA10-2.5-3 (0+40)	2.2	1.1	For visual characterization only.	0 - 10	brown fine to medium sand, trace coarse sand, trace fine to medium gravel, trace fine gravel sized concretions, trace organics (shells/wood), trace gray silt (7-10")
1/19/2010	S-PC1A-2.5	OCA10-2.5-4 (0+57)	0.3	3.4	With 4" void. For visual characterization only.	0 - 4	dark brown fine sand, trace silt, trace medium gravel, trace organics (shells/wood)
						4 - 7	brown fine sand, trace medium to coarse sand, trace organics (shells), trace fine gravel sized concretions, oxidation at 7"
						7 - 9	dark brown fine sand, trace silt, trace organics (shells)
						9 - 12	gray/brown fine sand, trace medium to coarse sand, trace organics (shells)
						12 - 15	gray/brown fine sand, little organics (shells)
						15 - 23	dark brown moderately degraded organics (wood), trace fine sand, trace shells, 1/4" fine sand seam at 19"
						23 - 33	gray brown fine to medium sand, little organics (shells), little coarse sand, trace fine gravel
1/19/2010	S-PC1A-3	OCA10-3-1 (0+00)	0.4	1.2	For visual characterization only.	0 - 3	dark brown loose silt, trace fine sand, trace organics leaf (litter, wood)
						3 - 9	dark brown silt, trace clay, trace fine sand, trace organics (vegetation)
						9 - 11	orange/brown fine to coarse sand, trace fine to medium gravel, trace organics (shells)
						11 - 13	dark brown silt, trace clay, trace fine sand, trace organics (vegetation)
						13 - 15	orange/brown fine to medium sand, little organics (shells), trace coarse sand, trace wood

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/19/2010	S-PC1A-3	OCA10-3-2 (0+20)	1.4	1.2	For visual characterization only.	0 - 3	brown fine to medium sand, trace coarse sand, trace fine gravel, trace organics (shells/wood)
						3 - 7	dark brown fine sand, trace medium to coarse sand, trace organics (shells/wood), trace medium to coarse gravel sized concretions
						7 - 10	brown-white fine to coarse gravel sized concretions, little fine to coarse sand, trace organics (shells)
1/19/2010	S-PC1A-3	OCA10-3-3 (0+30)	1.6	1.4	For visual characterization only.	0 - 3	brown fine sand, trace fine to medium gravel, trace medium to coarse sand, trace organics (shells/wood)
						3 - 6	dark brown fine sand, little organics (shells/wood), trace coarse gravel sized concretions
						6 - 11	dark brown fine sand, trace medium to coarse sand, trace organics (wood/shells), trace coarse gravel sized concretions
1/19/2010	S-PC1A-3	OCA10-3-4 (0+50) <sup>1</sup>	0.8	2.2	Selected for laboratory analysis.	0 - 1	gray/brown fine sand, trace organics (shells/wood), trace silt
						1 - 5	dark gray fine sand, trace organics (shells, vegetation), trace fine gravel
						5 - 13	dark gray brown silt, trace clay, trace fine sand, trace organics (wood), slight odor
						13 - 15	dark gray brown fine sand, trace organics (wood/shells)
						15 - 18	gray brown fine sand, trace silt, trace organics (shells)
						18 - 21	light gray brown fine sand, little organics (shells), trace fine gravel sized concretions
1/19/2010	S-PC1A-3	OCA10-3-5 (0+60)	0.6	1.3	For visual characterization only.	0 - 2	dark brown fine and, little silt, trace fine gravel, trace organics (vegetation)
						2 - 9	dark gray silt, little clay, trace fine sand
						9 - 13	dark gray brown clayey silt, trace organics (roots)
1/19/2010	S-PC1A-3.5	OCA10-3.5-1 (0+10)	0.8	1.1	For visual characterization only.	0 - 1	dark brown very loose silt, trace fine sand, trace organics (wood/vegetation)
						1 - 10	white brown fine to coarse gravel sized concretions, trace fine to coarse sand, trace organics (shells)
1/19/2010	S-PC1A-3.5	OCA10-3.5-2 (0+32)	0.7	0.9	For visual characterization only.	0 - 1	dark gray/brown fine sand, trace silt, trace organics (shells/vegetation)
						1 - 6	dark gray fine sand, trace silt, trace organics (shells/vegetation)
						6 - 10	dark gray fine sand, trace medium to coarse sand, trace fine to medium gravel sized concretions
1/19/2010	S-PC1A-3.5	OCA10-3.5-3 (0+98)	0.7	1.3	For visual characterization only.	0 - 5	brown fine sand, trace organics (shells), trace fine to coarse gravel sized concretions
						5 - 8	coarse gravel sized concretions, trace fine to medium sand, trace organics (shells)
						8 - 11	gray fine to coarse gravel sized concretions, little fine to medium sand, trace organics (shells)

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/19/2010	S-PC1B-1	OCA10-B1-1 (0+00)	0.5	0.9	For visual characterization only.	0 - 4	dark brown fine sand, trace medium to coarse sand, trace silt, trace fine gravel, trace medium gravel sized concretions, trace organics (shells/roots)
						4 - 8	white gray fine to coarse gravel sized concretions, little fine to medium sand, trace coarse sand, trace organics (shells/wood)
1/19/2010	S-PC1B-1	OCA10-B1-2 (0+10)	1.4	0.9	For visual characterization only.	0 - 2	brown fine to medium sand, little coarse sand, trace fine to medium gravel sized concretions, trace organics (shells)
						2 - 5	dark gray fine sand, little fine to medium gravel sized concretions, trace medium to coarse sand, trace organics (shells/wood)
						5 - 8	white gray fine to coarse gravel sized concretions, trace fine to coarse sand, trace organics (shells)
1/19/2010	S-PC1B-1	OCA10-B1-3 (0+30)	2.1	1.5	For visual characterization only.	0 - 11	brown grading to dark gray organics (shells), trace fine to coarse sand, trace fine to coarse gravel sized concretions
1/19/2010	S-PC1B-1	OCA10-B1-4 (0+40)	1.1	2.1	For visual characterization only.	0 - 4	gray brown fine to medium sand, trace coarse sand, trace organics (shells, leaf litter), trace medium gravel sized concretions
						4 - 7	dark gray fine sand, little organics (shells), trace medium to coarse sand, trace fine gravel
						7 - 19	dark gray fine sand, trace organics (shells/roots), trace medium to coarse sand, trace fine to medium gravel sized concretions, trace silt, slight odor increasing with depth
1/19/2010	S-PC1B-1	OCA10-B1-5 (0+46) <sup>1</sup>	0.7	2.0	Selected for laboratory analysis.	0 - 2	dark black very loose silt, trace fine sand, trace organics (leaf litter, wood)
						2 - 22	dark gray brown grading to dark gray silt, trace clay, trace organics (shells, roots), trace intermittent fine sand seams, slight odor
1/19/2010	S-PC1B-1.5	OCA10-B1.5-1 (0+00)	1.0	1.2	For visual characterization only.	0 - 10	dark brown silt, trace clay, trace fine sand, trace organics (roots, shells), slight odor
1/19/2010	S-PC1B-1.5	OCA10-B1.5-2 (0+23)	2.3	0.7	For visual characterization only.	0 - 6	brown fine to medium sand, little organics (shells), trace coarse sand, trace fine to medium gravel, trace fine to coarse gravel sized concretions, trace silt, trace glass
1/19/2010	S-PC1B-1.5	OCA10-B1.5-3 (0+47)	0.5	0.8	For visual characterization only.	0 - 5	dark brown silt, trace clay, trace fine to coarse sand, trace organics (shells, roots)
						5 - 7	dark brown fine sand, little silt, trace medium to coarse sand, trace organics (shells), trace fine to medium gravel sized concretions
1/19/2010	S-PC1C-1	OCA10-C1-1 (0+00) <sup>1</sup>	0.2	2.1	Selected for laboratory analysis.	0 - 2	gray brown silt, little fine sand, trace organics (vegetation/wood)
						2 - 12	dark gray brown silt, little fine sand, trace organics (shells/roots)
						12 - 20	dark gray silt, little clay, trace organics (vegetation/roots), soft
1/19/2010	S-PC1C-1	OCA10-C1-2 (0+10)	0.6	1.8	For visual characterization only.	0 - 5	brown fine to medium sand, trace coarse sand, trace fine gravel, trace organics (shells/wood)
						5 - 19	dark gray fine sand, trace medium sand, trace organics (shells/wood/vegetation), trace silt

See Notes on Page 20.

Georgia-Pacific LLC  
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site  
Supplemental Remedial Investigations/Feasibility Studies  
Monthly Report #35, January 2010

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/19/2010	S-PC1C-1	OCA10-C1-3 (0+30)	1.2	1.0	For visual characterization only.	0 - 6	brown fine to medium sand, little coarse sand, little fine to coarse gravel sized concretions, trace organics (shells)
						6 - 10	dark gray fine sand, little organics (shells), trace silt
1/19/2010	S-PC1C-1	OCA10-C1-4 (0+50)	1.5	0.9	For visual characterization only.	0 - 6	brown fine sand, trace organics (shells), trace fine to coarse gravel sized concretions
						6 - 8	white brown coarse gravel sized concretions, trace fine to medium sand
1/19/2010	S-PC1C-1	OCA10-C1-5 (0+59)	0.4	1.2	For visual characterization only.	0 - 1	gray brown fine sand, trace organics (shells)
						1 - 9	dark gray brown interbedded fine sand/silt, trace organics (shells/roots)
						9 - 14	dark gray silt, trace fine sand interbedding, trace organics (vegetation/shells)
1/19/2010	S-PC1C-1.5	OCA10-C1.5-1 (0+00)	0.4	1.5	For visual characterization only.	0 - 2	dark brown silt, trace fine sand, trace fine gravel, trace organics (vegetation/roots)
						2 - 5	dark brown silty fine sand, trace fine to coarse gravel, trace medium to coarse sand
						5 - 13	dark brown silt, trace clay, trace medium gravel sized concretions, trace organics (shells/roots)
						13 - 15	dark brown moderately degraded organics (wood)
1/19/2010	S-PC1C-1.5	OCA10-C1.5-2 (0+30)	0.2	1.7	For visual characterization only.	0 - 3	dark gray brown fine to medium sand, little fine to medium gravel sized concretions, trace coarse sand, trace silt, trace organics (roots/shells)
						3 - 9	gray brown fine to medium sand, little fine to coarse gravel sized concretions, trace coarse sand, trace fine gravel, trace organics (shells)
						9 - 17	dark brown silt, trace clay, trace fine sand, trace medium gravel sized concretions, trace organics (shells, roots), slight odor
1/19/2010	S-PC1C-1.5	OCA10-C1.5-3 (0+80)	2.6	0.9	For visual characterization only.	0 - 6	brown fine to medium sand, little organics (shells), trace coarse sand, trace fine to coarse gravel sized concretions
						6 - 8	dark gray/black organics (shells), little fine to medium gravel-sized concretions, trace fine sand, trace silt
1/19/2010	S-PC1C-1.5	OCA10-C1.5-4 (1+58)	0.6	1.0	For visual characterization only.	0 - 6	dark gray silty fine sand, trace organics (wood/roots/shells)
1/20/2010	S-PC1C-2	OCA10-C2-1 (0+00)	0.8	0.8	For visual characterization only.	0 - 5	dark brown sandy silt, trace organics (wood/vegetation)
						5 - 8	gray brown fine sand, trace medium to coarse sand, trace fine to coarse gravel sized concretions, trace fine gravel, trace organics (shells)
1/20/2010	S-PC1C-2	OCA10-C2-2 (0+20)	1.5	0.5	For visual characterization only.	0 - 5	white brown coarse gravel sized concretions, some fine sand, trace medium to coarse sand, trace fine to medium gravel sized concretions, trace organics (shells)

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/20/2010	S-PC1C-2	OCA10-C2-3 (0+30)	1.7	0.4	For visual characterization only.	0 - 2	brown fine sand, trace medium to coarse sand, trace coarse gravel concretions, trace organics (shells)
						2 - 4	dark gray fine to medium sand, trace coarse sand, trace fine to medium gravel concretions, trace fine gravel
1/20/2010	S-PC1C-2	OCA10-C2-4 (0+50)	1.3	0.5	For visual characterization only.	0 - 2	brown silty fine sand, little organics (shells, leaves, vegetation)
						2 - 5	dark gray fine sand, trace medium to coarse sand, trace organics (wood, shells, twigs) trace fine gravel
1/20/2010	S-PC1C-2	OCA10-C2-5 (0+63) <sup>1</sup>	1.2	0.8	Selected for laboratory analysis.	0 - 2	dark brown very loose silt, trace fine sand, trace organics (twigs, roots and vegetation), trace coarse gravel
						2 - 5	dark gray silty fine sand, trace fine gravel, trace organics (roots and shells)
						5 - 10	gray fine sand, little to some, fine to medium gravel concretions, trace medium to coarse sand, trace organics (shells)
1/20/2010	S-PC1C-2.5	OCA10-C2.5-1 (0+00)	1.5	0.9	For visual characterization only.	0 - 10	dark gray fine sand, trace silt, trace organics (shells, leaves, wood)
1/20/2010	S-PC1C-2.5	OCA10-C2.5-2 (0+30)	2.3	1.4	For visual characterization only.	0 - 10	dark gray brown silt, little clay, trace organics (roots, shells) trace fine sand, strong odor
						10 - 16	dark gray brown fine sand, trace silt, trace coarse gravel, strong odor
1/20/2010	S-PC1C-2.5	OCA10-C2.5-3 (0+50)	0.6	2.0	For visual characterization only.	0 - 2	dark gray organics (leaf litter), trace fine sand, trace silt
						2 - 5	gray brown fine to medium sand, trace organics (shells), trace medium gravel concretions, trace silt
						5 - 8	dark gray silt, little fine sand, trace organics (vegetation and shells)
						8 - 14	dark gray fine sand, trace silt, trace organics (wood, shells, twigs), slight odor
						14 - 23	dark gray fine to medium sand, little coarse sand, trace fine to coarse gravel, trace organics (shells), trace fine to coarse gravel concretions
1/20/2010	S-PC1C-2.5	OCA10-C2.5-4 (0+61)	1.0	1.7	For visual characterization only.	0 - 2	brown very loose silt, trace fine sand, trace organics (vegetation and roots)
						2 - 5	brown silt, trace clay, trace organics (shells)
						5 - 15	gray brown fine to medium sand, trace coarse sand, trace organics (wood and shells)
						15 - 19	dark gray fine to medium sand, little coarse sand, little coarse gravel size concretions, trace fine to medium gravel, trace organics (shells)
1/20/2010	S-PC1C-3	OCA10-C3-1 (0+00) <sup>1</sup>	0.0	1.4	Selected for laboratory analysis.	0 - 13	dark brown silt, trace clay, trace fine sand, trace organics (roots/vegetation/shells)
						13 - 14	gray concretion (medium gravel sized), trace organics (wood)
1/20/2010	S-PC1C-3	OCA10-C3-2 (0+10)	1.5	0.5	For visual characterization only.	0 - 4	dark brown grading to dark gray fine sand, trace medium to coarse sand, trace organics (shells), trace fine to medium gravel sized concretions
1/20/2010	S-PC1C-3	OCA10-C3-3 (0+30)	1.6	0.6	For visual characterization only.	0 - 5	brown fine to coarse sand, little fine to medium gravel, trace coarse gravel sized concretions, trace organics (shells)

See Notes on Page 20.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/20/2010	S-PC1C-3	OCA10-C3-4 (0+40)	1.5	0.5	For visual characterization only.	0 - 3	brown fine to coarse sand, little fine to medium gravel, trace organics (shells)
						3 - 6	gray brown fine sand, little fine to medium gravel sized concretions, trace fine to medium gravel, trace organics (shells)
1/20/2010	S-PC1C-3	OCA10-C3-5 (0+48)	1.0	0.9	For visual characterization only.	0 - 10	dark gray brown silt, little fine sand, trace fine to coarse gravel, trace organics (roots), trace clay
1/20/2010	S-PC1C-3.5	OCA10-C3.5-1 (0+00)	1.3	1.1	For visual characterization only.	0 - 3	brown fine to coarse sand, little fine to medium gravel, trace organics (shells)
						3 - 10	gray brown fine sand, trace medium to coarse sand, trace organics (wood, shells), trace coarse gravel
1/20/2010	S-PC1C-3.5	OCA10-C3.5-2 (0+20)	1.1	2.2	2 attempts (rock bottom). For visual characterization only.	0 - 2	dark brown fine sand, little to some organics (wood/roots), trace silt
						2 - 10	brown grading to gray brown fine to coarse sand, little fine to medium gravel, trace organics (shells)
1/20/2010	S-PC1C-3.5	OCA10-C3.5-3 (0+30)	1.9	0.8	For visual characterization only.	0 - 4	brown fine to coarse sand and fine to medium gravel, trace organics (shells/vegetation)
1/20/2010	S-PC1C-3.5	OCA10-C3.5-4 (0+40)	1.3	0.6	For visual characterization only.	0 - 6	brown fine to medium gravel, little coarse sand, trace fine to medium sand, trace organics (shells)
1/20/2010	S-PC1C-4	OCA10-C4-1 (0+00)	0.3	1.2	For visual characterization only.	0 - 5	dark brown silt, trace organics (leaf litter, roots and vegetation)
						5 - 6	dark brown fine sand, little silt, trace medium to coarse sand, trace fine gravel
						6 - 8	dark brown silt, trace organics (roots)
						8 - 10	dark brown fine to medium sand, little coarse sand, trace fine to medium gravel, trace organics (shells)
1/20/2010	S-PC1C-4	OCA10-C4-2 (0+10)	0.5	1.0	For visual characterization only.	0 - 6	dark brown silt, little organics (vegetation, roots, shells) trace fine sand
						6 - 9	brown fine to medium sand, little coarse sand, little fine to medium gravel sized concretions, trace fine gravel, trace organics (shells)
1/20/2010	S-PC1C-4	OCA10-C4-3 (0+30)	0.6	0.7	For visual characterization only.	0 - 4	dark brown loose silt, little organics (vegetation/wood), trace fine sand
						4 - 7	dark brown silt, trace clay, trace organics (roots/shells), trace fine sand
						7 - 9	dark brown fine sand, trace silt, trace fine gravel sized concretions, trace organics (shells)
1/20/2010	S-PC1C-4	OCA10-C4-4 (0+40) <sup>1</sup>	0.6	1.3	Selected for laboratory analysis.	0 - 3	dark brown very loose silt, trace fine sand, trace organics (wood, roots)
						3 - 10	dark brown silt, trace clay, trace fine sand, trace organics (vegetation, shells)
						10 - 12	gray brown fine sand, trace silt, trace organics (vegetation, shells)
						12 - 13	dark brown silt, little highly degraded organics
						13 - 16	gray brown fine sand, little fine to coarse gravel sized concretions, trace organics (wood, shells)

See Notes on Page 20.



**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table A — Off-Channel Areas — Sediment Cores Advanced in January 2010**

Date Collected	Transect	Location	Water (ft)	Penetration (ft)	Notes	Depth Interval (in)	Description
1/20/2010	S-PC1C-4	OCA10-C4-5 (0+48)	0.0	1.4	For visual characterization only.	0 - 2	dark brown very loose silt, trace fine sand, trace organics (vegetation, wood)
						2 - 6	dark brown silt, trace fine sand, trace organics (wood/shells)
						6 - 12	gray brown fine to medium sand, trace coarse sand, trace organics (shells/wood)
1/20/2010	S-PC1C-4.5	OCA10-C4.5-1 (0+00)	0.1	1.0	For visual characterization only.	0 - 7	dark brown silt, trace clay, trace organics (wood, roots), trace fine sand
						7 - 9	fine to coarse gravel sized concretions, trace fine sand, trace silt, trace organics (shells)
1/20/2010	S-PC1C-4.5	OCA10-C4.5-2 (0+11)	0.4	0.8	For visual characterization only.	0 - 3	dark brown very loose silt, trace fine sand, trace organics (vegetation, wood)
						3 - 11	dark brown silt, trace fine sand, trace organics (vegetation, roots), trace intermittent fine sand (seams), slight odor
1/20/2010	S-PC1C-4.5	OCA10-C4.5-3 (0+28)	0.7	1.3	For visual characterization only.	0 - 7	dark brown silt, trace clay, trace intermittent fine sand (seams), trace organics (roots, vegetation, shells)
						7 - 11	dark gray brown fine to medium sand, little fine to coarse gravel sized concretions, trace coarse sand, trace fine gravel, trace organics (shells)
1/20/2010	S-PC1C-4.5	OCA10-C4.5-4 (0+45)	0.4	0.9	For visual characterization only.	0 - 9	brown grading to dark gray brown fine sand, trace silt, trace organics (roots, wood, shells)

**Notes:**

<sup>1</sup>Chose to sample this location based on collaborative input and agreement from all parties including CDM, CH2MHILL, and ARCADIS.

EOW - Edge of water.

NR - Not recorded.

Only one core from every other transect was sent for laboratory analysis (see Table B). The remaining cores were collected for visual characterization only.

All cores collected using 3" Lexan.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table B — Off-Channel Areas — Samples Collected in January 2010**

Transect	Location	Sample ID	Depth Interval (in)
Area 1			
S-IS1-1	OCA1-1-5 (0+30)	K56838	0 - 2
		K56839	2 - 6
		K56840	6 - 12
		K56841	12 - 19
S-IS1-2	OCA1-2-3 (0+44)	K56842	0 - 2
		K56843	2 - 6
		K56844	6 - 9
S-IS1-3	OCA1-3-4 (0+62)	K56845	0 - 2
		K56846	2 - 6
		K56847	6 - 16
		K56848	16 - 19
S-IS1-4	OCA1-4-4 (0+22)	K56849	0 - 2
		K56850	2 - 8
		K56851	8 - 12
		K56852 <sup>1</sup> [K56853]	12 - 26
S-IS1-5	OCA1-5-3 (0+36)	K56854	0 - 2
		K56855	2 - 6
		K56856	6 - 9
		K56857	9 - 13
		K56858	13 - 24
S-IS1-6	OCA1-6-5 (0+44)	K56859	0 - 2
		K56860	2 - 6
		K56861	6 - 12
		K56862	12 - 16
		K56863	16 - 22
		K56864 <sup>1</sup> [K56866]	22 - 29
		K56865	29 - 33
S-IS1-7	OCA1-7-3 (0+20)	K56867	0 - 2
		K56868	2 - 6
		K56869	6 - 12
		K56870	12 - 18
Area 5			
S-IL1-1	OCA5-1-5 (0+89)	K56889	0 - 2
		K56890 <sup>1</sup> [K56891]	2 - 7
S-IL1-2	OCA5-2-1 (0+00)	K56892	0 - 2
		K56893	2 - 8
S-IL1-3	OCA5-3-1 (0+00)	K56894	0 - 2
		K56895	2 - 6
		K56896	6 - 9
		K56897	9 - 18

See Notes on Page 3.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table B — Off-Channel Areas — Samples Collected in January 2010**

Transect	Location	Sample ID	Depth Interval (in)
S-IL1-4	OCA5-4-3 (1+00)	K56871	0 - 2
		K56872	2 - 7
		K56873	7 - 11
		K56874	11 - 12
S-IL1-5	OCA5-5-3 (0+26)	K56875	0 - 2
		K56876	2 - 6
		K56877	6 - 9
		K56878	9 - 12
S-IL1-6	OCA5-6-4 (0+35)	K56879	0 - 2
		K56880	2 - 6
		K56881 [K56884]	6 - 12
		K56882	12 - 14
		K56883 <sup>1</sup>	14 - 22
S-IL1-7	OCA5-7-4 (0+15)	K56885	0 - 2
		K56886	2 - 6
		K56887	6 - 15
		K56888	15 - 20
Area 10			
S-PC1A-1	OCA10-1-4 (1+05)	K56898	0 - 2
		K56899	2 - 8
		K56900	8 - 16
S-PC1A-2	OCA10-2-1 (0+00)	K56901	0 - 2
		K56902	2 - 6
		K56903	6 - 9
S-PC1A-3	OCA10-3-4 (0+50)	K56904	0 - 2
		K56905	2 - 6
		K56906	6 - 12
		K56907	12 - 15
		K56908	15 - 18
		K56909	18 - 21
S-PC1B-1	OCA10-B1-5 (0+46)	K56914	0 - 2
		K56915	2 - 6
		K56916	6 - 12
		K56917 <sup>1</sup> [K56918]	12 - 22
S-PC1C-1	OCA10-C1-1 (0+00)	K56910	0 - 2
		K56911	2 - 6
		K56912	6 - 12
		K56913	12 - 20
S-PC1C-2	OCA10-C2-5 (0+63)	K56923	0 - 2
		K56924	2 - 6
		K56925	6 - 10

See Notes on Page 3.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table B — Off-Channel Areas — Samples Collected in January 2010**

Transect	Location	Sample ID	Depth Interval (in)
S-PC1C-3	OCA10-C3-1 (0+00)	K56919	0 - 2
		K56920	2 - 6
		K56921	6 - 12
		K56922	12 - 14
S-PC1C-4	OCA10-C4-4 (0+40)	K56926	0 - 2
		K56927	2 - 6
		K56928	6 - 9
		K56929	9 - 12
		K56930	12 - 16

**Notes:**

<sup>1</sup>MS/MSD performed on this sample.

Duplicate samples are in brackets.

Samples sent to TestAmerica Laboratories, Inc. for PCB, TOC, and grain size analysis.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table C — Fish Samples Filleted in January 2010**

Sample Type	Individual Adult Fillet <sup>1,2</sup>				
Target Species / Scientific Name	Smallmouth Bass ( <i>Micropterus dolomieu</i> )	Common Carp ( <i>Cyprinus carpio</i> )	Sunfish ( <i>Lepomis spp.</i> )	Panfish ( <i>Ambloplites rupestris</i> )	Catfish ( <i>Ictalurus punctatus</i> or <i>Ameiurus spp.</i> )
<b>Kalamazoo River Sample Locations</b>					
ABSA 2 Upstream of Morrow Dam (Morrow Lake)	11	11	--	--	--
ABSA 4 Near D Avenue	11	11	11 <sup>3</sup>	11 <sup>5</sup>	11 <sup>6</sup>
ABSA 6 Upstream of Otsego City Dam	11	11	11 <sup>4</sup>	11 <sup>5</sup>	11 <sup>6</sup>
ABSA 7 Upstream of Otsego Dam	11	11	--	--	--
ABSA 8 Upstream of Trowbridge Dam	11	11	11 <sup>4</sup>	11 <sup>5</sup>	11 <sup>6</sup>
NA Upstream of Allegan City Dam	11	11	--	--	--
ABSA 9 Upstream of Allegan Dam (Lake Allegan)	11	11	11 <sup>3</sup>	11 <sup>5</sup>	11 <sup>7</sup>
Total Number of Fish Fillet Samples	77	77	44	44	44

**Notes:**

- Adult target species were smallmouth bass, common carp, bluegill (sunfish), yellow perch (panfish) and channel catfish. Due to the absence or very low abundance of certain target species at some locations, substitute species were collected instead. These included pumpkinseed for bluegill, rock bass for yellow perch, and bullhead for channel catfish.
  - Collection size of adult fish generally followed Michigan DNR's fishing regulations and GLEAS Procedure #31, but smaller, edible-size fish were taken as needed if preferred sizes were unavailable for collection.
  - Pumpkinseed.
  - Bluegill.
  - Rock bass.
  - Bullhead.
  - Channel catfish.
- ABSA - Aquatic Biological Study Area.  
NA - not applicable; No ABSA number for this location.  
-- - Sunfish, panfish and catfish were not targeted in these locations.  
Samples sent to TestAmerica Laboratories, Inc. for PCB and percent lipid analysis.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table D — Hot Spot Assessment — Sediment Samples — Analytical Data Received in January 2010**

Location	Sample ID	Depth Interval (in)	SDG	Date SDG Received from Lab
KRT5-A	K56471	0 - 2	KAL489	1/4/10
	K56472	2 - 6	KAL489	1/4/10
	K56473	6 - 12	KAL489	1/4/10
	K56474	12 - 24	KAL489	1/4/10
	K56475	24 - 36	KAL489	1/4/10
	K56476 <sup>1</sup>	36 - 48	KAL489	1/4/10
	K56477 [K56479]	48 - 60	KAL489 [KAL489]	1/4/10
	K56478	60 - 70	KAL489	1/4/10
KRT5-C	K56480	0 - 2	KAL489	1/4/10
	K56481	2 - 6	KAL489	1/4/10
	K56482	6 - 12	KAL489	1/4/10
	K56483	12 - 14	KAL489	1/4/10
KRT5-D	K56484	0 - 2	KAL489	1/4/10
	K56485	2 - 6	KAL489	1/4/10
	K56486	6 - 9	KAL489	1/4/10
KRT5-E	K56487	0 - 2	KAL489	1/4/10
	K56488	2 - 6	KAL489	1/4/10
	K56489	6 - 12	KAL489	1/4/10
	K56490	12 - 18	KAL489	1/4/10
KRT5-F	K56491	0 - 2	KAL490	1/12/10
	K56492	2 - 6	KAL490	1/12/10
	K56493	6 - 12	KAL490	1/12/10
	K56494	12 - 20	KAL490	1/12/10
	K56495	20 - 24	KAL490	1/12/10
	K56496	24 - 29	KAL490	1/12/10
	K56497	29 - 32	KAL490	1/12/10
	K56498	32 - 35	KAL490	1/12/10
	K56499	35 - 42	KAL490	1/12/10
	K56500	42 - 44	KAL490	1/12/10
KPT4-3	K56501	0 - 2	KAL490	1/12/10
	K56502	2 - 6	KAL490	1/12/10
	K56503	6 - 9	KAL490	1/12/10
	K56504	9 - 11	KAL490	1/12/10
	K56505	11 - 24	KAL490	1/12/10
	K56506	24 - 35	KAL490	1/12/10
	K56507	35 - 38	KAL490	1/12/10
	K56508	38 - 40	KAL490	1/12/10
	K56509	40 - 48	KAL490	1/12/10
	K56510	48 - 58	KAL491	1/15/10
KPT23-6	K56531	0 - 2	KAL492	1/19/10
	K56532	2 - 6	KAL492	1/19/10

See Notes on Page 4.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table D — Hot Spot Assessment — Sediment Samples — Analytical Data Received in January 2010**

Location	Sample ID	Depth Interval (in)	SDG	Date SDG Received from Lab
KPT23-6 (Cont.)	K56533	6 - 12	KAL492	1/19/10
	K56534	12 - 24	KAL492	1/19/10
	K56535	24 - 33	KAL492	1/19/10
KPT23-C	K56511	0 - 2	KAL491	1/15/10
	K56512	2 - 6	KAL491	1/15/10
	K56513	6 - 12	KAL491	1/15/10
	K56514 [K56517]	12 - 24	KAL491 [KAL491]	1/15/10
	K56515 <sup>1</sup>	24 - 36	KAL490	1/12/10
	K56516	36 - 38	KAL491	1/15/10
KPT23-D	K56518	0 - 2	KAL491	1/15/10
	K56519	2 - 6	KAL491	1/15/10
	K56520	6 - 12	KAL491	1/15/10
	K56521	12 - 22	KAL491	1/15/10
KPT23-E	K56522	0 - 2	KAL491	1/15/10
	K56523	2 - 6	KAL491	1/15/10
	K56524	6 - 12	KAL491	1/15/10
	K56525 [K56528]	12 - 24	KAL491 [KAL491]	1/15/10
	K56526 <sup>1</sup>	24 - 36	KAL491	1/15/10
	K56527	36 - 39	KAL491	1/15/10
KPT23-F	K56529	0 - 2	KAL491	1/15/10
	K56530	2 - 6	KAL491	1/15/10
KRT5-2	K56536	0 - 2	KAL492	1/19/10
	K56537	2 - 6	KAL492	1/19/10
	K56538	6 - 12	KAL492	1/19/10
	K56539	12 - 19	KAL492	1/19/10
KRT5-5	K56540	0 - 2	KAL492	1/19/10
	K56541	2 - 6	KAL492	1/19/10
	K56542	6 - 10	KAL492	1/19/10
	K56543	10 - 12	KAL492	1/19/10
	K56544	12 - 15	KAL492	1/19/10
	K56545	15 - 21	KAL492	1/19/10
	K56546	21 - 24	KAL492	1/19/10
	K56547	24 - 30	KAL492	1/19/10
KPT19-C	K56568	2 - 6	KAL494	1/12/10
	K56569	6 - 12	KAL494	1/12/10
	K56570 [K56572]	12 - 24	KAL494 [KAL494]	1/12/10
	K56571 <sup>1</sup>	24 - 36	KAL494	1/12/10
KPT19-E	K56579	0 - 2	KAL494	1/12/10
	K56580	2 - 6	KAL494	1/12/10
	K56581	6 - 12	KAL494	1/12/10
	K56582	12 - 15	KAL494	1/12/10

See Notes on Page 4.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table D — Hot Spot Assessment — Sediment Samples — Analytical Data Received in January 2010**

Location	Sample ID	Depth Interval (in)	SDG	Date SDG Received from Lab
KPT19-F	K56583	0 - 2	KAL494	1/12/10
	K56584	2 - 6	KAL494	1/12/10
	K56585	6 - 12	KAL494	1/12/10
	K56586 [K56588]	12 - 24	KAL494 [KAL494]	1/12/10
	K56587 <sup>1</sup>	24 - 36	KAL492	1/19/10
KPT19-G	K56573	0 - 2	KAL494	1/12/10
	K56574	2 - 6	KAL494	1/12/10
	K56575	6 - 12	KAL494	1/12/10
	K56576	12 - 20	KAL494	1/12/10
	K56577	20 - 24	KAL494	1/12/10
	K56578	24 - 30	KAL494	1/12/10
S-IM1-3	K56609	0 - 2	KAL497	1/27/10
	K56610	2 - 6	KAL497	1/27/10
	K56611	6 - 12	KAL497	1/27/10
	K56612 [K56514]	12 - 24	KAL497 [KAL497]	1/27/10
	K56613	24 - 27	KAL497	1/27/10
S-IM1-4	K56615	0 - 2	KAL497	1/27/10
	K56616	2 - 6	KAL497	1/27/10
	K56617	6 - 12	KAL497	1/27/10
	K56618	12 - 17	KAL497	1/27/10
S-IM1-5	K56619	0 - 2	KAL497	1/27/10
	K56620	2 - 5	KAL497	1/27/10
	K56621 <sup>1</sup>	5 - 12	KAL497	1/27/10
	K56622	12 - 15	KAL497	1/27/10
	K56623	15 - 20	KAL497	1/27/10
	K56624	20 - 25	KAL497	1/27/10
S-IM1-6	K56604	0 - 2	KAL496	1/20/10
	K56605	2 - 6	KAL496	1/20/10
	K56606	6 - 12	KAL496	1/20/10
	K56607	12 - 15	KAL496	1/20/10
	K56608	15 - 19	KAL496	1/20/10
S-IM1-7	K56597	0 - 2	KAL496	1/20/10
	K56598	2 - 6	KAL496	1/20/10
	K56599	6 - 10	KAL496	1/20/10
	K56600	10 - 15	KAL496	1/20/10
	K56601	15 - 24	KAL496	1/20/10
	K56602	24 - 28	KAL496	1/20/10
	K56603	28 - 30	KAL496	1/20/10
S-IM1-8	K56589	0 - 2	KAL496	1/20/10
	K56590	2 - 6	KAL496	1/20/10
	K56591	6 - 12	KAL496	1/20/10

See Notes on Page 4.



**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table D — Hot Spot Assessment — Sediment Samples — Analytical Data Received in January 2010**

Location	Sample ID	Depth Interval (in)	SDG	Date SDG Received from Lab
S-IM1-8 (Cont.)	K56592 [K56596]	12 - 24	KAL496 [KAL496]	1/20/10
	K56593 <sup>1</sup>	24 - 36	KAL496	1/20/10
	K56594	36 - 48	KAL496	1/20/10
	K56595	48 - 50	KAL496	1/20/10
KPT19-K	K56625	0 - 2	KAL497	1/27/10
	K56626	2 - 6	KAL497	1/27/10
	K56627	6 - 12	KAL497	1/27/10
	K56628 [K56631]	12 - 24	KAL497 [KAL498]	1/27/10 [1/25/10]
	K56629 <sup>1</sup>	24 - 36	KAL498	1/25/10
	K56630	36 - 42	KAL498	1/25/10
KPT20-B	K56632	0 - 2	KAL498	1/25/10
	K56633	2 - 6	KAL498	1/25/10
	K56634	6 - 12	KAL498	1/25/10
	K56635	12 - 23	KAL498	1/25/10
KPT20-C	K56636	0 - 2	KAL498	1/25/10
	K56637	2 - 6	KAL498	1/25/10
	K56638	6 - 12	KAL498	1/25/10
KPT20-A	K56639	0 - 2	KAL498	1/25/10
	K56640	2 - 7	KAL498	1/25/10
	K56641	7 - 12	KAL498	1/25/10
KPT20-8	K56642	0 - 2	KAL498	1/25/10
	K56643	2 - 6	KAL498	1/25/10
	K56644	6 - 8	KAL498	1/25/10

**Notes:**

SDG - Sample delivery group.

<sup>1</sup>MS/MSD performed on this sample.

Duplicate samples are in brackets.

Samples analyzed by TestAmerica Laboratories, Inc. for PCB, TOC, and grain size analysis.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table E — Plainwell TCRA Area — Groundwater and Surface Water Samples — Analytical Data**  
**Received in January 2010**

Date Sampled	ARCADIS Sample ID	Location ID	SDG	Date SDG Received from Lab
12/14/09	TS40051	MW-12	KAL507	1/13/10
	TS31009 [TS31010]	SG-5	KAL507 [KAL507]	1/13/10
12/15/09	TS40052	MW-14	KAL507	1/13/10
	TS40053	MW-11	KAL507	1/13/10
	TS40054	MW-13	KAL507	1/13/10
	TS40055	MW-15	KAL507	1/13/10
12/16/09	TS40056	MW-10	KAL507	1/13/10
	TS40057 <sup>1</sup>	MW-5	KAL507	1/13/10
	TS40058	MW-4	KAL507	1/13/10
	TS40059	MW-8	KAL507	1/13/10
12/17/09	TS40060 [TS40061]	MW-3	KAL507 [KAL507]	1/13/10
	TS40062 [TS40063]	MW-7	KAL507 [KAL507]	1/13/10
	TS40064	MW-2	KAL507	1/13/10
	TS40065	MW-6	KAL507	1/13/10
12/18/09	TS40066	MW-1	KAL507	1/13/10
	TS40067	MW-9	KAL507	1/13/10
	TS31011 <sup>1</sup>	SG-5	KAL507	1/13/10

**Notes:**

All samples collected by ARCADIS were sent to TestAmerica Laboratories, Inc. for the following analyses: PCBs, total organic carbon (TOC), total dissolved solids (TDS), total suspended solids (TSS), chloride, sulfate and alkalinity, and total metals (i.e., sodium, calcium, potassium, magnesium).

SDG - Sample delivery group.

<sup>1</sup>MS/MSD performed on this sample.

Duplicate samples are in brackets.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table F — Crown Vantage Area — Sediment Samples Collected in December 2009 — Status of Analytical Data**

Location	Sample ID	Depth Interval (in)	SDG	Date SDG Received from Lab
CVT-B-1	K56645	0 - 2	KAL499	1/27/10
	K56646	2 - 7	KAL499	1/27/10
	K56647	7 - 12	KAL499	1/27/10
	K56648	12 - 15	KAL499	1/27/10
	K56649	15 - 17	KAL499	1/27/10
	K56650	17 - 26	KAL499	1/27/10
	K56651	26 - 30	KAL499	1/27/10
CVT-B-2	K56652	0 - 2	KAL499	1/27/10
	K56653	2 - 6	KAL499	1/27/10
	K56654	6 - 12	KAL499	1/27/10
	K56655 <sup>1</sup>	12 - 19	KAL499	1/27/10
	K56656 [K56657]	19 - 25	KAL499 [KAL499]	1/27/10
CVT-C-2	K56658	0 - 2	KAL499	1/27/10
	K56659	2 - 6	KAL499	1/27/10
	K56660	6 - 12	KAL499	1/27/10
	K56661	12 - 15	KAL499	1/27/10
	K56662	15 - 18	KAL499	1/27/10
CVT-D-1	K56663	0 - 2	KAL499	1/27/10
	K56664	2 - 6	KAL499	1/27/10
	K56665	6 - 12	KAL500	1/28/10
	K56666	12 - 19	KAL500	1/28/10
	K56667	19 - 27	KAL500	1/28/10
	K56668	27 - 30	KAL500	1/28/10
CVT-D-2	K56669	0 - 2	KAL500	1/28/10
	K56670	2 - 6	KAL500	1/28/10
	K56671	6 - 12	KAL500	1/28/10
	K56672	12 - 19	KAL500	1/28/10
CVT-F-1	K56673	0 - 2	KAL500	1/28/10
	K56674	2 - 6	KAL500	1/28/10
	K56675 [K56678]	6 - 12	KAL500 [KAL500]	1/28/10
	K56676 <sup>1</sup>	12 - 24	KAL500	1/28/10
	K56677	24 - 27	KAL500	1/28/10
CVT-F-2	K56679	0 - 2	KAL500	1/28/10
	K56680	2 - 6	KAL500	1/28/10
	K56681	6 - 12	KAL500	1/28/10
	K56682	12 - 17	KAL500	1/28/10
	K56683	17 - 23	KAL500	1/28/10
	K56684	23 - 28	KAL500	1/28/10
	K56685	28 - 31	KAL501	1/29/10
CVT-G-2	K56686	0 - 2	KAL501	1/29/10
	K56687 [K56692]	2 - 6	KAL501 [KAL501]	1/29/10

See Notes on Page 3.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table F — Crown Vantage Area — Sediment Samples Collected in December 2009 — Status of Analytical Data**

Location	Sample ID	Depth Interval (in)	SDG	Date SDG Received from Lab
CVT-G-2 (Cont.)	K56688	6 - 9	KAL501	1/29/10
	K56689	9 - 12	KAL501	1/29/10
	K56690 <sup>1</sup>	12 - 24	KAL501	1/29/10
	K56691	24 - 28	KAL501	1/29/10
CVT-H-1	K56693	0 - 2	KAL501	1/29/10
	K56694	2 - 6	KAL501	1/29/10
	K56695	6 - 12	KAL501	1/29/10
	K56696	12 - 15	KAL501	1/29/10
	K56697	15 - 19	KAL501	1/29/10
	K56698	19 - 26	KAL501	1/29/10
CVT-H-2	K56699	0 - 2	KAL501	1/29/10
	K56700	2 - 6	KAL501	1/29/10
	K56701	6 - 12	KAL501	1/29/10
	K56702	12 - 18	KAL501	1/29/10
	K56703 <sup>1</sup>	18 - 29	NR	NR
	K56704	29 - 33	KAL501	1/29/10
CVT-08-01	K56705	0 - 2	KAL501	1/29/10
	K56706	2 - 6	NR	NR
	K56707	6 - 11	NR	NR
	K56708	11 - 15	NR	NR
	K56709	15 - 21	NR	NR
CVT-08-03	K56710	0 - 2	NR	NR
	K56711	2 - 6	NR	NR
	K56712	6 - 12	NR	NR
	K56713	12 - 18	NR	NR
	K56714	18 - 24	NR	NR
	K56715	24 - 27	NR	NR
CVT-01-04	K56716	0 - 2	NR	NR
	K56717	2 - 5	NR	NR
	K56718	5 - 9	NR	NR
CVT-03-03	K56719	0 - 2	NR	NR
	K56720	2 - 6	NR	NR
	K56721	6 - 9	NR	NR
CVT-03-05	K56722	0 - 2	NR	NR
	K56723	2 - 5	NR	NR
	K56724	5 - 8	NR	NR
	K56725 <sup>1</sup> [K56726]	8 - 23	NR	NR
CVT-04-01	K56727	0 - 2	NR	NR
	K56728	2 - 6	NR	NR
	K56729	6 - 12	NR	NR
	K56730	12 - 19	NR	NR

See Notes on Page 3.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table F — Crown Vantage Area — Sediment Samples Collected in December 2009 — Status of Analytical Data**

Location	Sample ID	Depth Interval (in)	SDG	Date SDG Received from Lab
CVT-04-03	K56731	0 - 2	NR	NR
	K56732	2 - 6	NR	NR
	K56733	6 - 9	NR	NR
	K56734	9 - 16	NR	NR
	K56735	16 - 19	NR	NR
CVT-05-03	K56736	0 - 2	NR	NR
	K56737	2 - 6	NR	NR
	K56738	6 - 12	NR	NR
	K56739	12 - 16	NR	NR
	K56740	16 - 21	NR	NR
CVT-05-05	K56741	0 - 2	NR	NR
	K56742	2 - 6	NR	NR
	K56743	6 - 12	NR	NR
	K56744	12 - 15	NR	NR

**Notes:**

<sup>1</sup>MS/MSD performed on this sample.

Duplicate samples are in brackets.

Samples sent to TestAmerica Laboratories, Inc. for PCB, TOC, and grain size analysis.

SDG - Sample delivery group.

NR - Not received by January 31, 2010.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table G — Off-Channel Areas — Status of Sediment Samples Collected in December 2009**

<b>Transect</b>	<b>Location</b>	<b>Sample ID</b>	<b>Depth Interval (in)</b>	<b>Analysis</b>	<b>SDG</b>	<b>Date SDG Received from Lab</b>
S-PC2-1	OCA14-01-01 (0+00)	K56805	0 - 2	PCB/TOC	NR	NR
		K56806	2 - 6	PCB/TOC	NR	NR
		K56807	6 - 9	PCB/TOC	NR	NR
		K56808	9 - 11	PCB/TOC	NR	NR
		K56809 <sup>1</sup> [K56810]	11 - 22	PCB/TOC	NR	NR
S-PC2-2	OCA14-02-02 (0+10)	K56811	0 - 2	PCB/TOC	NR	NR
		K56812	2 - 6	PCB/TOC/Grain Size	NR	NR
		K56813	6 - 12	PCB/TOC/Grain Size	NR	NR
		K56814	12 - 24	PCB/TOC/Grain Size	NR	NR
		K56815	24 - 26	PCB/TOC	NR	NR
S-PC2-7.0	OCA14-7-05 (0+46)	K56816	0 - 2	PCB/TOC/Grain Size	NR	NR
		K56817	2 - 6	PCB/TOC/Grain Size	NR	NR
		K56818	6 - 12	PCB/TOC/Grain Size	NR	NR
		K56819	12 - 17	PCB/TOC/Grain Size	NR	NR
		K56820	17 - 19	PCB/TOC/Grain Size	NR	NR
S-PC2-6.0	OCA14-6.0-03 (0+30)	K56821	0 - 2	PCB/TOC/Grain Size	NR	NR
		K56822	2 - 6	PCB/TOC/Grain Size	NR	NR
		K56823	6 - 12	PCB/TOC/Grain Size	NR	NR
		K56824 <sup>1</sup> [K56825]	12 - 19	PCB/TOC/Grain Size	NR	NR
S-PC2-05	OCA14-05-04 (0+30)	K56826	0 - 2	PCB/TOC/Grain Size	NR	NR
		K56827	2 - 6	PCB/TOC/Grain Size	NR	NR
		K56828	6 - 12	PCB/TOC/Grain Size	NR	NR
		K56829	12 - 15	PCB/TOC/Grain Size	NR	NR
S-PC2-04	OCA14-04-03 (0+48)	K56830	0 - 2	PCB/TOC/Grain Size	NR	NR
		K56831	2 - 6	PCB/TOC/Grain Size	NR	NR
		K56832	6 - 12	PCB/TOC/Grain Size	NR	NR
		K56833	12 - 23	PCB/TOC/Grain Size	NR	NR
S-PC2-03	OCA14-03-02 (0+10)	K56834	0 - 2	PCB/TOC/Grain Size	NR	NR
		K56835	2 - 6	PCB/TOC/Grain Size	NR	NR
		K56836	6 - 12	PCB/TOC/Grain Size	NR	NR
		K56837	12 - 21	PCB/TOC/Grain Size	NR	NR

**Notes:**

<sup>1</sup>MS/MSD performed on this sample.

Duplicate samples are in brackets.

Samples sent to TestAmerica Laboratories, Inc. for analysis.

NR - Not received by January 31, 2010.

SDG - Sample delivery group.

Georgia-Pacific LLC  
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site  
Supplemental Remedial Investigations/Feasibility Studies  
Monthly Report #35, January 2010

**Table H — Validated PCB Results for Sediment Focused Step-out Samples — Data Received by ARCADIS in November 2009**

Sample Name: Sample Depth(in): Date Collected: Location ID:	Units	K56377 0 - 2 07/10/09 FF-35-60S	K56378 2 - 6 07/10/09 FF-35-60S	K56379 6 - 12 07/10/09 FF-35-60S	K56380 12 - 15 07/10/09 FF-35-60S	K56381 0 - 2 07/10/09 FF-35-60N	K56382 2 - 6 07/10/09 FF-35-60N	K56383 6 - 12 07/10/09 FF-35-60N	K56384 12 - 15 07/10/09 FF-35-60N	K56385 15 - 19 07/10/09 FF-35-60N	K56386 0 - 2 07/10/09 FF-35-40N	K56387 2 - 6 07/10/09 FF-35-40N	K56388 6 - 10 07/10/09 FF-35-40N
<b>PCB Aroclors</b>													
Aroclor-1016	mg/kg	0.18 U	0.087 UJ	0.066 U	0.055 U	0.27 U	0.47 U	0.091 U	0.11 U	0.064 U	0.24 U	0.31 U	0.065 U
Aroclor-1221	mg/kg	0.18 U	0.087 UJ	0.066 U	0.055 U	0.27 U	0.47 U	0.091 U	0.11 U	0.064 U	0.24 U	0.31 U	0.065 U
Aroclor-1232	mg/kg	0.18 U	0.087 UJ	0.066 U	0.055 U	0.27 U	0.47 U	0.091 U	0.17	0.064 U	0.24 U	0.31 U	0.065 U
Aroclor-1242	mg/kg	0.82	0.31 J	0.066 U	0.055 U	1.2	1.2	0.58	0.11 U	0.064 U	1.3	0.99	0.065 U
Aroclor-1248	mg/kg	0.55	0.087 UJ	0.066 U	0.055 U	0.27 U	0.47 U	0.091 U	0.11 U	0.064 U	0.83	1.2	0.055 J
Aroclor-1254	mg/kg	0.39 J	0.10 J	0.066 U	0.055 U	0.89 J	2.6 J	0.22 J	0.11 U	0.064 U	0.95 J	0.99 J	0.065 U
Aroclor-1260	mg/kg	0.18 U	0.087 UJ	0.066 U	0.055 U	0.18 J	0.35 J	0.091 U	0.11 U	0.064 U	0.22 J	0.31 U	0.065 U
Total PCBs	mg/kg	1.8	0.41 J	0.066 U	0.055 U	2.3 J	4.2 J	0.80	0.17	0.064 U	3.3	3.2 J	0.055 J
<b>Miscellaneous</b>													
Percent Solids	%	53.2	51.7	79.2	89.3	35.6	52.2	54.4	44.5	75.9	39.6	48	74.9
<b>TOC</b>													
Total Organic Carbon	mg/kg	79,700	76,100	11,300	22,900	112,000	74,500	58,400	65,700	6,100	143,000	97,700	25,200 J
<b>Grain Size Analysis</b>													
Gravel	%	1.4	2	5.9	29.2	0.8	2.2	0	0	14.3	9.2	10.9	11.1
Coarse Sand	%	1.7	1.3	5.7	23.6	1.2	1.3	1.2	2.1	4.1	2.2	8.3	6.2
Medium Sand	%	12.9	10.4	30.8	29.1	6.2	6.1	5.1	2.5	8.4	12.4	15.2	17.8
Fine Sand	%	63.9	54.6	46.8	14.5	73.8	68.3	47.3	12.8	63.8	46.5	43.6	38.5
Silt	%	18.5	25.9	8.9	3.4	14.5	17	34.3	52.1	6.4	24.4	19.6	20.5
Clay	%	1.7	5.7	1.9	0.2	3.5	5.1	12.1	30.5	3	5.2	2.4	6
<b>Grain Size Analysis - % passing (particle size, um)</b>													
Sieve, 3 inch	% passing	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)
Sieve, 2 inch	% passing	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)
Sieve, 1.5 inch	% passing	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)
Sieve, 1 inch	% passing	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)
Sieve, 3/4 inch	% passing	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)
Sieve, 3/8 inch	% passing	100 (9500)	100 (9500)	96.9 (9500)	88.9 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)	91 (9500)	94.6 (9500)	98.1 (9500)	97.1 (9500)
Sieve, #4	% passing	98.6 (4750)	98 (4750)	94.1 (4750)	70.8 (4750)	99.2 (4750)	97.8 (4750)	100 (4750)	100 (4750)	85.7 (4750)	90.8 (4750)	89.1 (4750)	88.9 (4750)
Sieve, #10	% passing	97 (2000)	96.7 (2000)	88.4 (2000)	47.1 (2000)	97.9 (2000)	96.5 (2000)	98.8 (2000)	97.9 (2000)	81.6 (2000)	88.5 (2000)	80.8 (2000)	82.7 (2000)
Sieve, #20	% passing	94.9 (850)	94.6 (850)	74.1 (850)	30.8 (850)	95.5 (850)	94.2 (850)	98 (850)	97.3 (850)	79.1 (850)	84.8 (850)	74.3 (850)	75.7 (850)
Sieve, #40	% passing	84 (425)	86.3 (425)	57.6 (425)	18 (425)	91.8 (425)	90.4 (425)	93.7 (425)	95.5 (425)	73.2 (425)	76.1 (425)	65.6 (425)	65 (425)
Sieve, #60	% passing	60.8 (250)	68 (250)	34.5 (250)	9.7 (250)	76 (250)	74.2 (250)	77.9 (250)	92.7 (250)	52.4 (250)	64.1 (250)	56.3 (250)	49.2 (250)
Sieve, #80	% passing	47.6 (180)	56.6 (180)	20.5 (180)	6.2 (180)	55.2 (180)	56.3 (180)	65.2 (180)	89.7 (180)	25.7 (180)	54.7 (180)	49 (180)	38.3 (180)
Sieve, #100	% passing	38.9 (150)	48.7 (150)	15.6 (150)	5 (150)	41.8 (150)	44.8 (150)	58.8 (150)	87.7 (150)	16.2 (150)	48.3 (150)	43.6 (150)	33.6 (150)
Sieve, #200	% passing	20.2 (75)	31.6 (75)	10.8 (75)	3.5 (75)	18 (75)	22.1 (75)	46.4 (75)	82.6 (75)	9.4 (75)	29.6 (75)	21.9 (75)	26.5 (75)
Hydrometer Reading 1	% passing	5.3 (36)	17.3 (35)	6 (36)	1.7 (37)	9.1 (36)	14.7 (35)	28.2 (33)	60.4 (33)	6.3 (36)	16.1 (35)	13.1 (36)	12.6 (35)
Hydrometer Reading 2	% passing	3.9 (23)	13 (23)	5.4 (23)	1.2 (23)	7.5 (23)	10.9 (22)	22.8 (21)	54 (21)	5.2 (23)	12.4 (23)	9.5 (23)	10.9 (22)
Hydrometer Reading 3	% passing	3.1 (13.4)	11.1 (13.1)	4.2 (13.2)	1.2 (13.5)	5.9 (13.2)	9 (13.1)	20.7 (12.5)	45.4 (12.4)	4.1 (13.2)	8.8 (13.2)	5.9 (13.5)	9.3 (13)
Hydrometer Reading 4	% passing	2.4 (9.5)	8.9 (9.3)	3.1 (9.6)	0.7 (9.8)	5.1 (9.2)	7 (9.2)	16.4 (8.9)	36.9 (8.6)	3.5 (9.4)	7.6 (9.4)	4.2 (9.6)	7.6 (9.1)
Hydrometer Reading 5	% passing	1.7 (6.8)	5.7 (6.8)	1.9 (6.9)	0.2 (6.7)	3.5 (6.7)	5.1 (6.7)	12.1 (6.5)	30.5 (6.4)	3 (6.5)	5.2 (6.9)	2.4 (6.6)	6 (6.8)
Hydrometer Reading 6	% passing	1 (3.3)	3.6 (3.3)	1.3 (3.3)	0.2 (3.3)	2.7 (3.4)	3.2 (3.4)	7.7 (3.2)	19.5 (3.2)	1.8 (3.3)	2.6 (3.4)	0.3 (3.4)	3.6 (3.4)
Hydrometer Reading 7	% passing	0.8 (1.4)	1.2 (1.4)	0.7 (1.4)	-0.4 (1.4)	0.9 (1.4)	1.1 (1.4)	3.4 (1.4)	11 (1.4)	1.2 (1.4)	1.4 (1.4)	-1.5 (1.4)	1 (1.4)

See Notes on Page 2.

Georgia-Pacific LLC  
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site  
Supplemental Remedial Investigations/Feasibility Studies  
Monthly Report #35, January 2010

**Table H — Validated PCB Results for Sediment Focused Stepout Samples — Data Received in November 2009**

Sample Name: Sample Depth(in): Date Collected: Location ID:		K56389 10 - 15 07/10/09 FF-35-40N	K56390 15 - 19 07/10/09 FF-35-40N	K56391 0 - 2 07/10/09 FF-35-40S	K56392 2 - 6 07/10/09 FF-35-40S	K56393 6 - 12 07/10/09 FF-35-40S	K56394 [K56395] 12 - 19 07/10/09 FF-35-40S	K56396 19 - 29 07/10/09 FF-35-40S
	Units							
<b>PCB Aroclors</b>								
Aroclor-1016	mg/kg	0.12 U	0.072 U	0.13 U	0.60 U	0.098 U	0.061 U [0.067 U]	0.079 U
Aroclor-1221	mg/kg	0.12 U	0.072 U	0.13 U	0.60 U	0.098 U	0.061 U [0.067 U]	0.079 U
Aroclor-1232	mg/kg	0.12 U	0.072 U	0.13 U	0.60 U	0.098 U	0.061 U [0.067 U]	0.079 U
Aroclor-1242	mg/kg	0.12 U	0.072 U	0.72	1.0	0.088 J	0.061 U [0.034 J]	0.079 U
Aroclor-1248	mg/kg	0.12 U	0.072 U	0.18	1.1	0.098 U	0.061 U [0.067 U]	0.079 U
Aroclor-1254	mg/kg	0.12 U	0.072 U	0.43 J	1.1 J	0.098 U	0.061 U [0.067 U]	0.079 U
Aroclor-1260	mg/kg	0.12 U	0.072 U	0.083 J	0.60 U	0.098 U	0.061 U [0.067 U]	0.079 U
Total PCBs	mg/kg	0.12 U	0.072 U	1.4 J	3.2 J	0.088 J	0.061 U [0.034 J]	0.079 U
<b>Miscellaneous</b>								
Percent Solids	%	40.4	67.9	36.5	32.2	49.7	77 [73.1]	62.4
<b>TOC</b>								
Total Organic Carbon	mg/kg	103,000 J	21,500	129,000	160,000	82,900	19,600 J [22,700]	12,900 J
<b>Grain Size Analysis</b>								
Gravel	%	3.3	0.9	4.8	8.3	1.3	4.5	2.7
Coarse Sand	%	4.7	2.7	5.3	2.8	2.9	12.2	3.9
Medium Sand	%	12.6	7.9	6.5	4.4	23.5	56.3	23.6
Fine Sand	%	49.1	67.1	57.5	60.3	37.1	17.3	61
Silt	%	27.7	18.2	24.7	19.3	28.5	8.5	7.3
Clay	%	2.7	3.1	1.3	4.9	6.8	1.1	1.4
<b>Grain Size Analysis - % passing (particle size, um)</b>								
Sieve, 3 inch	% passing	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)
Sieve, 2 inch	% passing	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)
Sieve, 1.5 inch	% passing	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)
Sieve, 1 inch	% passing	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)
Sieve, 3/4 inch	% passing	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)
Sieve, 3/8 inch	% passing	100 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)
Sieve, #4	% passing	96.7 (4750)	99.1 (4750)	95.2 (4750)	91.7 (4750)	98.7 (4750)	95.5 (4750)	97.3 (4750)
Sieve, #10	% passing	92 (2000)	96.4 (2000)	89.9 (2000)	88.9 (2000)	95.8 (2000)	83.3 (2000)	93.4 (2000)
Sieve, #20	% passing	86 (850)	93.1 (850)	87.7 (850)	87.1 (850)	84.3 (850)	46.6 (850)	84.9 (850)
Sieve, #40	% passing	79.4 (425)	88.4 (425)	83.4 (425)	84.4 (425)	72.4 (425)	26.9 (425)	69.7 (425)
Sieve, #60	% passing	61 (250)	70.3 (250)	73.2 (250)	77.6 (250)	58 (250)	17 (250)	36.9 (250)
Sieve, #80	% passing	43.7 (180)	43.3 (180)	59.9 (180)	66.7 (180)	49.8 (180)	13.4 (180)	20 (180)
Sieve, #100	% passing	36.8 (150)	32.1 (150)	50.4 (150)	48.6 (150)	44.9 (150)	11.9 (150)	14.2 (150)
Sieve, #200	% passing	30.3 (75)	21.3 (75)	26 (75)	24.2 (75)	35.3 (75)	9.6 (75)	8.7 (75)
Hydrometer Reading 1	% passing	11.3 (36)	8.4 (35)	4.6 (37)	18.6 (35)	16.2 (34)	4.3 (36)	5.4 (36)
Hydrometer Reading 2	% passing	8.8 (23)	7.3 (22)	3.5 (23)	15.6 (23)	12.4 (22)	3.7 (23)	4.7 (23)
Hydrometer Reading 3	% passing	7.6 (13.3)	5.5 (13.1)	3.5 (13.4)	12.5 (13.1)	10.5 (12.9)	2.7 (13.3)	3.4 (13.3)
Hydrometer Reading 4	% passing	3.9 (9.5)	4.3 (9.3)	2.4 (9.7)	9.4 (9.5)	7.7 (9.1)	1.7 (9.3)	2.1 (9.3)
Hydrometer Reading 5	% passing	2.7 (6.8)	3.1 (6.8)	1.3 (6.9)	4.9 (6.6)	6.8 (6.6)	1.1 (6.8)	1.4 (6.8)
Hydrometer Reading 6	% passing	0.2 (3.3)	1.9 (3.3)	1.3 (3.3)	3.3 (3.3)	3.9 (3.3)	0.6 (3.4)	0.8 (3.2)
Hydrometer Reading 7	% passing	-1 (1.4)	0.1 (1.4)	-0.9 (1.4)	0.3 (1.4)	1.1 (1.4)	0.1 (1.4)	0.1 (1.4)

**Notes:**

J - The compound was positively identified; however, the associated numerical value is an estimated concentration only.

U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

UJ - The compound was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

mg/kg - milligram per kilogram.

Samples analyzed by TestAmerica Laboratories, Inc.

Duplicate results in brackets.



**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table I — Validated Radionuclide Results for Sediment Samples Collected in Lake Allegan — Data Received by ARCADIS in November 2009**

Sample Name:		K16818	K16819	K16820	K16821	K16822	K16823	K16824	K16825
Sample Depth (cm):		0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8
Date Collected:		05/13/09	05/13/09	05/13/09	05/13/09	05/13/09	05/13/09	05/13/09	05/13/09
Location ID:	Units	SPI-40	SPI-40	SPI-40	SPI-40	SPI-40	SPI-40	SPI-40	SPI-40
<b>Geochronology</b>									
Lead-210	pCi/g	2.39 ± 0.15	2.44 ± 0.16	2.48 ± 0.16	2.69 ± 0.16	2.88 ± 0.17	3.14 ± 0.17	3.09 ± 0.17	2.42 ± 0.15
Cesium-137	pCi/g	0.125 ± 0.071	0.168 ± 0.056	0.164 ± 0.069	0.207 ± 0.046	0.152 ± 0.076	0.224 ± 0.069	0.268 ± 0.058	0.236 ± 0.054

Sample Name:		K16826	K16827	K16828	K16829	K16830	K16831	K16832	K16833
Sample Depth (cm):		8 - 9	9 - 10	10 - 12	12 - 14	14 - 16	16 - 18	18 - 20	20 - 25
Date Collected:		05/13/09	05/13/09	05/13/09	05/13/09	05/13/09	05/13/09	05/13/09	05/13/09
Location ID:	Units	SPI-40	SPI-40	SPI-40	SPI-40	SPI-40	SPI-40	SPI-40	SPI-40
<b>Geochronology</b>									
Lead-210	pCi/g	2.72 ± 0.16	2.44 ± 0.16	2.5 ± 0.15	2.34 ± 0.15	2.07 ± 0.14	1.52 ± 0.12	1.48 ± 0.12	1.26 ± 0.11
Cesium-137	pCi/g	0.233 ± 0.057	0.207 ± 0.102	0.235 ± 0.054	0.322 ± 0.088	0.364 ± 0.065	0.332 ± 0.046	0.435 ± 0.114	0.553 ± 0.061

Sample Name:		K16834	K16835	K16836	K16837	K16838	K16839	K16840	K16841
Sample Depth (cm):		25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65
Date Collected:		05/13/09	05/13/09	05/13/09	05/13/09	05/13/09	05/13/09	05/13/09	05/13/09
Location ID:	Units	SPI-40	SPI-40	SPI-40	SPI-40	SPI-40	SPI-40	SPI-40	SPI-40
<b>Geochronology</b>									
Lead-210	pCi/g	1.5 ± 0.12	1.41 ± 0.12	1.09 ± 0.11	1.53 ± 0.12	1.35 ± 0.12	1.2 ± 0.11	1.12 ± 0.11	1.09 ± 0.11
Cesium-137	pCi/g	0.592 ± 0.079	0.548 ± 0.075	0.713 ± 0.083	1.198 ± 0.075	1.515 ± 0.075	0.705 ± 0.055	0.357 ± 0.043	0.113 ± 0.052

Sample Name:		K16842	K16872	K16873	K16874	K16875	K16876	K16877
Sample Depth (cm):		65 - 70	70 - 75	75 - 80	80 - 85	85 - 90	90 - 95	95 - 100
Date Collected:		05/13/09	05/13/09	05/13/09	05/13/09	05/13/09	05/13/09	05/13/09
Location ID:	Units	SPI-40	ALG-10	ALG-10	ALG-10	ALG-10	ALG-10	ALG-10
<b>Geochronology</b>								
Lead-210	pCi/g	1.06 ± 0.11	1.47 ± 0.13	1.44 ± 0.12	1.38 ± 0.12	1.2 ± 0.11	1.28 ± 0.11	0.79 ± 0.09
Cesium-137	pCi/g	< 0.057	0.618 ± 0.053	0.624 ± 0.069	0.597 ± 0.061	0.636 ± 0.065	0.633 ± 0.071	0.642 ± 0.046

**Notes:**

Samples analyzed by Mass Spec Services.

pCi/g - average picocuries per gram.

**Georgia-Pacific LLC**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**  
**Monthly Report #35, January 2010**

**Table J — Validated PCB Results for Sediment Samples Collected in Lake Allegan — Data Received by ARCADIS in November 2009**

Sample Name: Sample Depth(in): Date Collected: Location ID:	Units	K56399 0 - 2 10/27/09 SPI-1	K56400 0 - 2 10/27/09 SPI-2	K56401 0 - 2 10/27/09 SPI-3	K56402 0 - 2 10/27/09 SPI-4	K56403 0 - 2 10/27/09 SPI-5	K56404 0 - 2 10/27/09 SPI-6	K56405 0 - 2 10/27/09 SPI-7	K56406 0 - 2 10/27/09 SPI-8	K56407 0 - 2 10/27/09 SPI-9	K56408 0 - 2 10/27/09 SPI-10	K56409 0 - 2 10/27/09 SPI-11	K56410 0 - 2 10/27/09 SPI-12
<b>PCB Aroclors</b>													
Aroclor-1016	mg/kg	0.29 U	0.32 U	0.23 U	0.23 U	0.29 U	0.24 UJ	0.21 UJ	0.23 U	0.22 U	0.26 U	0.22 U	0.24 U
Aroclor-1221	mg/kg	0.29 U	0.32 U	0.23 U	0.23 U	0.29 U	0.24 UJ	0.21 UJ	0.23 U	0.22 U	0.26 U	0.22 U	0.24 U
Aroclor-1232	mg/kg	0.29 U	0.32 U	0.23 U	0.23 U	0.29 U	0.24 UJ	0.21 UJ	0.23 U	0.22 U	0.26 U	0.22 U	0.24 U
Aroclor-1242	mg/kg	0.50	0.68	0.59	0.49	0.78	0.75 J	0.29 J	1.0	0.62	0.58	0.88	0.73
Aroclor-1248	mg/kg	0.33	0.32 U	0.23 U	0.26	0.29 U	0.24 UJ	0.18 J	0.23 U	0.22 U	0.26 U	0.22 U	0.24 U
Aroclor-1254	mg/kg	0.23 J	0.21 J	0.19 J	0.21 J	0.23 J	0.20 J	0.11 J	0.28	0.21 J	0.16 J	0.19 J	0.16 J
Aroclor-1260	mg/kg	0.29 U	0.32 U	0.23 U	0.23 U	0.29 U	0.24 UJ	0.21 UJ	0.23 U	0.22 U	0.26 U	0.22 U	0.24 U
Total PCBs	mg/kg	1.1	0.89	0.78	0.96	1.0	0.95 J	0.58 J	1.3	0.83	0.74	1.1	0.89
<b>Miscellaneous</b>													
Percent Solids	%	18.8	16.2	21.9	23.3	16.6	22.3	24.4	21.8	22.7	19.8	21.1	21.4
<b>TOC</b>													
Total Organic Carbon	mg/kg	53,500	99,300 J	56,800	54,900	67,500	48,400	41,300	62,600	51,800	65,400	60,700	56,000
<b>Grain Size Analysis</b>													
Gravel	%	0	0	0	0	0	0	0	0	0	0	0	0
Coarse Sand	%	0	0	0	0	0	0	0	0	0	0	0	0
Medium Sand	%	0.1	0.2	0.1	0.3	0.2	0.1	0.3	0.3	0	0	0.3	0.3
Fine Sand	%	0.9	1.4	1.5	5.2	1	0.7	1.6	4.4	1	1.3	2	2.2
Silt	%	80.6	83.8	75.4	79.3	79	82	79.8	81	81.2	80.9	84.7	81.9
Clay	%	18.4	14.7	23	15.2	19.8	17.2	18.2	14.3	17.7	17.8	13.1	15.5
<b>Grain Size Analysis - % passing (particle size, um)</b>													
Sieve, 3 inch	% passing	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)
Sieve, 2 inch	% passing	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)
Sieve, 1.5 inch	% passing	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)
Sieve, 1 inch	% passing	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)
Sieve, 3/4 inch	% passing	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)
Sieve, 3/8 inch	% passing	100 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)
Sieve, #4	% passing	100 (4750)	100 (4750)	100 (4750)	100 (4750)	100 (4750)	100 (4750)	100 (4750)	100 (4750)	100 (4750)	100 (4750)	100 (4750)	100 (4750)
Sieve, #10	% passing	100 (2000)	100 (2000)	100 (2000)	100 (2000)	100 (2000)	100 (2000)	100 (2000)	100 (2000)	100 (2000)	100 (2000)	100 (2000)	100 (2000)
Sieve, #20	% passing	99.9 (850)	99.9 (850)	99.9 (850)	99.9 (850)	99.9 (850)	99.9 (850)	99.9 (850)	99.9 (850)	100 (850)	100 (850)	100 (850)	99.9 (850)
Sieve, #40	% passing	99.9 (425)	99.8 (425)	99.9 (425)	99.7 (425)	99.8 (425)	99.9 (425)	99.7 (425)	99.7 (425)	100 (425)	100 (425)	99.7 (425)	99.7 (425)
Sieve, #60	% passing	99.8 (250)	99.6 (250)	99.9 (250)	99.3 (250)	99.7 (250)	99.8 (250)	99.4 (250)	99.4 (250)	99.8 (250)	99.9 (250)	99.4 (250)	99.5 (250)
Sieve, #80	% passing	99.6 (180)	99.4 (180)	99.7 (180)	98.8 (180)	99.5 (180)	99.7 (180)	99 (180)	99 (180)	99.7 (180)	99.7 (180)	99 (180)	99 (180)
Sieve, #100	% passing	99.6 (150)	99.4 (150)	99.6 (150)	98.5 (150)	99.5 (150)	99.7 (150)	99 (150)	98.9 (150)	99.6 (150)	99.7 (150)	98.9 (150)	98.9 (150)
Sieve, #200	% passing	99 (75)	98.5 (75)	98.4 (75)	94.5 (75)	98.8 (75)	99.2 (75)	98.1 (75)	95.3 (75)	98.9 (75)	98.7 (75)	97.8 (75)	97.5 (75)
Hydrometer Reading 1	% passing	79 (32)	76.4 (33)	83.4 (33)	67.5 (32)	77.7 (33)	72.4 (32)	83.4 (32)	67.5 (32)	77.2 (32)	77.4 (32)	73.2 (33)	75.1 (33)
Hydrometer Reading 2	% passing	50 (22)	41.1 (22)	57.5 (22)	39.2 (22)	47.3 (22)	43.6 (22)	44.3 (22)	39.7 (22)	47.5 (22)	45.1 (22)	47 (22)	41.5 (22)
Hydrometer Reading 3	% passing	36.9 (12.9)	29.4 (13.2)	43.1 (12.8)	30.5 (12.9)	39.1 (12.8)	34 (12.8)	33.9 (13)	30.5 (12.9)	35.1 (12.8)	35.2 (12.8)	34 (13)	31.1 (13)
Hydrometer Reading 4	% passing	26.3 (9.3)	20.6 (9.4)	31.6 (9.4)	21.8 (9.5)	28 (9.1)	24.4 (9.1)	26.1 (9.1)	21.2 (9)	25.2 (9.2)	25.3 (9.2)	23.5 (9.3)	20.7 (9.2)
Hydrometer Reading 5	% passing	18.4 (6.7)	14.7 (6.8)	23 (6.8)	15.2 (6.5)	19.8 (6.6)	17.2 (6.7)	18.2 (6.7)	14.3 (6.7)	17.7 (6.5)	17.8 (6.8)	13.1 (6.6)	15.5 (6.9)
Hydrometer Reading 6	% passing	10.5 (3.3)	2.9 (3.3)	8.6 (3.3)	6.5 (3.3)	11 (3.4)	9.6 (3.4)	7.8 (3.2)	6.9 (3.3)	7.4 (3.3)	9.9 (3.3)	7.8 (3.4)	7.8 (3.4)
Hydrometer Reading 7	% passing	5.3 (1.4)	0 (1.4)	2.9 (1.4)	2.2 (1.4)	5.5 (1.4)	4.8 (1.4)	5.2 (1.4)	2.3 (1.4)	2.5 (1.4)	5 (1.4)	2.6 (1.4)	2.6 (1.4)

See Notes on Page 2.

Georgia-Pacific LLC  
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site  
Supplemental Remedial Investigations/Feasibility Studies  
Monthly Report #35, January 2010

**Table J — Validated PCB Results for Sediment Samples Collected in Lake Allegan — Data Received in November 2009**

Sample Name: Sample Depth(in): Date Collected: Location ID:	Units	K56411 [K56412] 0 - 2 10/27/09 SPI-13	K56413 0 - 2 10/27/09 SPI-14	K56414 0 - 2 10/27/09 SPI-15	K56415 0 - 2 10/27/09 SPI-16	K56416 0 - 2 10/27/09 SPI-17	K56417 0 - 2 10/27/09 SPI-18	K56418 0 - 2 10/27/09 SPI-19
<b>PCB Aroclors</b>								
Aroclor-1016	mg/kg	0.17 U [0.18 U]	0.14 U	0.21 U	0.21 U	0.20 U	0.21 U	0.20 U
Aroclor-1221	mg/kg	0.17 U [0.18 U]	0.14 U	0.21 U	0.21 U	0.20 U	0.21 U	0.20 U
Aroclor-1232	mg/kg	0.17 U [0.18 U]	0.14 U	0.21 U	0.21 U	0.20 U	0.21 U	0.20 U
Aroclor-1242	mg/kg	0.59 [0.43]	0.52	0.73	0.74	0.72	0.56	1.0
Aroclor-1248	mg/kg	0.24 [0.26]	0.14 U	0.21 U	0.21 U	0.20 U	0.30	0.20 U
Aroclor-1254	mg/kg	0.22 [0.19]	0.15	0.19 J	0.15 J	0.18 J	0.25	0.25
Aroclor-1260	mg/kg	0.17 U [0.18 U]	0.14 U	0.21 U	0.21 U	0.20 U	0.21 U	0.20 U
Total PCBs	mg/kg	1.1 [0.88]	0.67	0.92	0.89	0.90	1.1	1.3
<b>Miscellaneous</b>								
Percent Solids	%	29.5 [29.2]	35.8	23.2	24.2	24.1	24.3	25.1
<b>TOC</b>								
Total Organic Carbon	mg/kg	51,400 [48,900]	37,500	59,100	63,800	65,300	60,300	59,000
<b>Grain Size Analysis</b>								
Gravel	%	0 [0]	0	0	0	0	0	0
Coarse Sand	%	0 [0]	0	0	0	0	0	0
Medium Sand	%	10.2 [7.2]	4.8	6.7	10.5	3.9	3.2	8
Fine Sand	%	22.1 [28.4]	17.6	13.6	18.2	11	4	15.8
Silt	%	53.9 [51.3]	62.1	65.3	58.3	65.6	74.3	60.2
Clay	%	13.7 [13]	15.4	14.4	13	19.4	18.5	15.9
<b>Grain Size Analysis - % passing (particle size, um)</b>								
Sieve, 3 inch	% passing	100 (75000) [100 (75000)]	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)	100 (75000)
Sieve, 2 inch	% passing	100 (50000) [100 (50000)]	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)	100 (50000)
Sieve, 1.5 inch	% passing	100 (37500) [100 (37500)]	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)	100 (37500)
Sieve, 1 inch	% passing	100 (25000) [100 (25000)]	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)	100 (25000)
Sieve, 3/4 inch	% passing	100 (19000) [100 (19000)]	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)	100 (19000)
Sieve, 3/8 inch	% passing	100 (9500) [100 (9500)]	100 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)	100 (9500)
Sieve, #4	% passing	100 (4750) [100 (4750)]	100 (4750)	100 (4750)	100 (4750)	100 (4750)	100 (4750)	100 (4750)
Sieve, #10	% passing	100 (2000) [100 (2000)]	100 (2000)	100 (2000)	100 (2000)	100 (2000)	100 (2000)	100 (2000)
Sieve, #20	% passing	94.6 (850) [98.8 (850)]	99.2 (850)	99.3 (850)	97.5 (850)	99.6 (850)	98.9 (850)	98.8 (850)
Sieve, #40	% passing	89.7 (425) [92.7 (425)]	95.2 (425)	93.3 (425)	89.5 (425)	96.1 (425)	96.8 (425)	92 (425)
Sieve, #60	% passing	86.7 (250) [88.4 (250)]	91.8 (250)	88.4 (250)	83.6 (250)	93.3 (250)	95.3 (250)	87 (250)
Sieve, #80	% passing	84.5 (180) [85.2 (180)]	86.8 (180)	86.1 (180)	80.4 (180)	91.3 (180)	94.8 (180)	84.5 (180)
Sieve, #100	% passing	82.6 (150) [82.7 (150)]	83.9 (150)	85.1 (150)	78.8 (150)	89.8 (150)	94.6 (150)	83 (150)
Sieve, #200	% passing	67.6 (75) [64.3 (75)]	77.5 (75)	79.7 (75)	71.4 (75)	85.1 (75)	92.8 (75)	76.1 (75)
Hydrometer Reading 1	% passing	63.2 (32) [63.2 (33)]	67.9 (33)	72.8 (33)	63.5 (33)	84.4 (32)	80.4 (32)	72.5 (33)
Hydrometer Reading 2	% passing	46 (21) [50.6 (22)]	55.4 (21)	61.7 (21)	45.8 (22)	68.2 (21)	62.3 (21)	57.1 (21)
Hydrometer Reading 3	% passing	28.9 (12.8) [30.5 (13)]	37.9 (12.8)	39.4 (12.9)	28.2 (13.1)	46.5 (12.7)	36.5 (12.9)	33.9 (12.9)
Hydrometer Reading 4	% passing	19.4 (9.3) [20.5 (9.4)]	25.4 (9.4)	25.5 (9.5)	15.6 (9.3)	27.5 (9.1)	26.2 (9.1)	21 (9.1)
Hydrometer Reading 5	% passing	13.7 (6.7) [13 (6.8)]	15.4 (6.8)	14.4 (6.6)	13 (6.7)	19.4 (6.7)	18.5 (6.7)	15.9 (6.7)
Hydrometer Reading 6	% passing	7.9 (3.3) [5.4 (3.3)]	7.9 (3.3)	6 (3.3)	5.5 (3.4)	11.3 (3.4)	8.2 (3.2)	8.2 (3.3)
Hydrometer Reading 7	% passing	6 (1.4) [5.4 (1.4)]	5.4 (1.4)	6 (1.4)	5.5 (1.4)	8.6 (1.4)	5.6 (1.4)	5.6 (1.4)

**Notes:**

J - The compound was positively identified; however, the associated numerical value is an estimated concentration only

U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit

UJ - The compound was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

mg/kg - milligram per kilogram.

Samples analyzed by TestAmerica Laboratories, Inc.

Duplicate results in brackets.